052 CENTRE FOR THE STUDY OF HUMAN DEVELOPMENT
FIVE YEAR INTERVIEW WITH MOTHER

CARD/ COLUMN	VAR NO	TITLE	CODES
1/1-3	001	Serial Number	3 digits (case one = 001)
1/4-5	002	Age	2 digits (e.g. 05 = 5 years old)
1/6	003	Group	1 A Case 001 - 044 2 B Case 045 - 101 3 C Case 102 - 163 4 D Case 164 - 223
1/7	004	Sex	1 Female 2 Male
1/8-9	005	Investigator	00 Cases not seen 01 Cases seen
1/10	006	Interview done	0 Not done 1 Early one week plus 2 Early two weeks plus 3 Early four weeks plus 4 Late one week plus 5 Late two weeks plus 6 Late four weeks plus 7 Late two months plus 8 Late four months plus 9 To time
1/11	007	How is child (now)	- No information 0 Not well 1 Fairly well 2 Very well 3 Extremely well
1/13-17		How is child (since last visit)	
1/13	008	Chronic/recurrent ailment	1 Yes 0 Not mentioned
1/14	009	No illness	1 Yes 0 Not mentioned
1/15	010	Mild illness	1 Yes 0 Not mentioned
1/16	011	Definitely ill up to two weeks	1 Yes 0 Not mentioned
1/17	012	Definitely ill more	1 Yes 0 Not mentioned

NB In this codebook the code '-' signifies 'blank'

CARD/ COLUMN	VAR NO	TITLE	CODES
1/19	013	Any serious accidents or frights - frequency	- No information 0 Nil 5 1 fright only 6 1 accident only 7 Several frights only 8 Several accidents only 9 Both
1/21	014	Any serious accidents or frights - biggest disturbance	- No accidents/frights 0 Nil 2 No information 3 Mild: 1-10 minutes 4 Mild: 11-30 minutes 5 Mild. More 6 Marked: 1-10 minutes 7 Marked 11-30 minutes 8 Marked. 31-120 minutes 9 Marked: More
1/22	015	Any serious accidents or frights - sequelae	- No accidents/frights 0 Nil 2 Mild: Up to one week 3 Mild. Up to one month 4 Mild. Up to three months 5 Mild· More 6 Marked. Up to one week 7 Marked Up to one month 8 Marked Up to three months 9 Marked More
1/24-34		Any operations, lancing, dental treatment, circumcision, etc. Any injections, vaccinations or innoculations - kind:	
1/24	016	No information	1 Yes 0 Not mentioned
1/25	017	Nil	1 Yes 0 Not mentioned
1/26	018	Other	1 Yes 0 Not mentioned
1/27	019	Vaccination	1 Yes 0 Not mentioned
1/28	020	Innoculation	1 Yes 0 Not mentioned
1/29	021	Injection	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
1/30	022	Lancing	1 Yes 0 Not mentioned
1/31	023	Circumcision	1 Yes 0 Not mentioned
1/32	024	Tooth extract/drilling	1 Yes 0 Not mentioned
1/33	025	Operation	1 Yes 0 Not mentioned
1/34	026	Various	1 Yes 0 Not mentioned
1/36	027	Any operations, lancing, dental treatment, circumcision, etc. Any injections, vaccinations or innoculations - biggest disturbance	- No operations, etc. 0 Nil 2 No information 3 Mild 1-10 minutes 4 Mild 11-30 minutes 5 Mild. More 6 Marked· 1-10 minutes 7 Marked. 11-30 minutes 8 Marked. 31-120 minutes 9 Marked More
1/38	028	Any operations, lancing, dental treatment, circumcision, etc. Any injections, vaccinations or innoculations - sequelae	- No operations, etc. 0 Nil 1 Other 4 Mild fear Clinic, etc. 5 Mild fear Doctors/nurses 6 Mild fear Both 7 Marked fear Clinic, etc. 8 Marked fear. Doctors/nurses 9 Marked fear Both
1/40	029	Has he been away from any member of family, or anyone away from him - hospital/ resident nursery	- No information 0 Nil 1 1-2 days 2 3-7 days 3 8-14 days 4 15-30 days 5 31-89 days 6 90+ days

CARD/ COLUMN	VAR NO	TITLE	CODES
1/41	030	Has he been away from any member of family or anyone away from him - elsewhere from mother	- No information 0 Nil 1 1-2 days 2 3-7 days 3 8-14 days 4 15-30 days 5 31-89 days 6 90+ days
1/42	031	Has he been away from any member of family or anyone away from him - elsewhere from others	- No information 0 Nil 1 1-2 days 2 3-7 days 3 8-14 days 4 15-30 days 5 31-89 days 6 90+ days
1/44	032	During separation	- No separation 0 No information 4 Happier 5 Same 6 Some disturbance less 7 Some disturbance 7 days+ 8 Definitely unhappy less 9 Definitely unhappy 7 days+
1/46	033	Disturbance during separation - sequelae	- No separation 0 Nil special 5 Other change 6 Improvement 7 Some disturbance 1-7 days 8 Some disturbance 8-28 days 9 Some disturbance more
1/47	034	Has the family been away together - duration	- No information 0 Nil 1 3 days or less 2 4-10 days 3 11-17 days 4 18-24 days 5 25-32 days 6 More

CARD/ COLUMN	VAR NO	TITLE	CODES
1/48	035	Has the family been away together - effects	- No holiday 0 No disturbance 4 Disturbance sometimes mild 5 Disturbance sometimes variable 6 Disturbance sometimes marked 7 Disturbance always mild 8 Disturbance always variable 9 Disturbance always marked
1/49	036	Has child been on holiday other times - total duration	- No information 0 Nil 1 3 days or less 2 4-10 days 3 11-17 days 4 18-24 days 5 25-32 days 6 More
1/51	037	Effects on child of changes in the family since last year	- No removal 0 Removal no effect 1 Removal child better
1/52	038	Effects on child of changes in the family since last year	4 Slight disturbance 1-7 days 5 Slight disturbance 8-30 days 6 Slight disturbance more 7 Marked disturbance 1-7 days 8 Marked disturbance 8-30 days 9 Marked disturbance more
1/54	039	Has anyone new lived with the family for 6 months or more	- No addition
1/55	040	Has anyone new lived with the family for 6 months or more	1 Temporary visitors disturbance nil 2 Temporary visitors disturbance slight 3 Temporary visitors disturbance marked 0 No temporary visitors
1/56	041	Has anyone new lived with the family for 6 months or more	4 Other. disturbance nil 5 Other disturbance slight 6 Other disturbance marked 7 Other baby disturbance nil

CARD/ COLUMN	VAR NO	TITLE	CODES
1/57	042	Has anyone new lived with the family for 6 months or more	7 Baby disturbance nil 8 Baby disturbance slight 9 Baby disturbance marked 0 No baby
1/59	043	Has anyone left the family. Effects on child	- No departures 1 Temporary visitors. disturbance nil 2 Temporary visitors disturbance slight 3 Temporary visitors disturbance marked 4 Other disturbance nil 5 Other disturbance slight 6 Other disturbance marked 7 Siblings disturbance nil 8 Siblings disturbance slight 9 Siblings disturbance marked
1/61	044	Has anyone in the family been seriously ill	- No illness/death 1 Serious illness (of other) disturbance nil 2 Serious illness (of other) disturbance slight 3 Serious illness (of other) disturbance marked
1/62	045	Has anyone in the family been seriously ill	4 Serious illness (immediate family) disturbance nil 5 Serious illness (immediate family) disturbance slight 6 Serious illness (immediate family) disturbance marked
1/63	046	Has anyone in the family been seriously ill	7 Death disturbance nil 8 Death disturbance slight 9 Death disturbance marked
1/65	047	Mother works	- No change 0 No work 4 Occasional working sometimes in home 5 Working at home 6 Other change 7 Temporarily worked 8 Stopped work 9 Started work

CARD/ COLUMN	VAR NO	TITLE	CODES
1/67-75		Has father been in the same work in past year	
1/67	048	No change	1 Yes 0 Not mentioned
1/68	049	Changes, variable effects	1 Yes 0 Not mentioned
1/69	050	Change(s), more money	1 Yes 0 Not mentioned
1/70	051	Change(s), same money	1 Yes 0 Not mentioned
1/71	052	Change(s), less money	1 Yes 0 Not mentioned
1/72	053	Unemployed up to 1 month	1 Yes 0 Not mentioned
1/73	054	Unemployed up to 2 months	1 Yes 0 Not mentioned
1/74	055	Unemployed up to 3 months	1 Yes 0 Not mentioned
1/75	056	Unemployed more	1 Yes 0 Not mentioned
1/76	057	Has father been in the same work in past year. Effects of change on child	- No change 6 Effects on child nil special 7 Effects on child good 8 Disturbance slight 9 Disturbance marked
1/78	058	Older siblings started school in past year. Effects on child	- No effects 6 Yes, effects nil special 7 Yes, effects good 8 Yes, effects slight disturbance 9 Yes, effects marked disturbance
1/80		Card Number	1 Card 1
2/5-15		Has child been looked after regularly by other people, or attended nursery, school or play groups, etc.	
2/5	059	Start/change school	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
2/6	060	Less than once a week - home	1 Yes 0 Not mentioned
2/7	061	Less than once a week - other	1 Yes 0 Not mentioned
2/8	062	Once a week - home	1 Yes 0 Not mentioned
2/9	063	Once a week - other	1 Yes 0 Not mentioned
2/10	064	Several times a week - home	1 Yes 0 Not mentioned
2/11	065	Several times a week - other	1 Yes 0 Not mentioned
2/12	066	Daily - home	1 Yes 0 Not mentioned
2/13	067	Daily - other	1 Yes 0 Not mentioned
2/14	068	Nursery/nursery school	1 Yes 0 Not mentioned
2/15	069	School	1 Yes 0 Not mentioned
2/16-25		Is child unhappy when you leave him	
2/16	070	Never left	1 Yes 0 Not mentioned
2/17	071	Not with	1 Yes 0 Not mentioned
2/18	072	Not with all others	1 Yes 0 Not mentioned
2/19	073	Not with school/nursery	1 Yes 0 Not mentioned
2/20	074	Variable with	1 Yes 0 Not mentioned
2/21	075	Variable with all others	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
2/22	076	Variable with school/ nursery	1 Yes 0 Not mentioned
2/23	077	Yes with	1 Yes 0 Not mentioned
2/24	078	Yes with all others	1 Yes 0 Not mentioned
2/25	079	Yes with school/nursery	1 Yes 0 Not mentioned
2/27	080	Is child unhappy when you leave him - overall	- Never left 0 Always asleep 1 Unhappy never 2 Unhappy rarely 3 Unhappy sometimes 4 Unhappy usually
2/29-30	081	If started/changed in past year	01 No disturbance 02 Mild disturbance up to 1 week 03 Mild disturbance up to 1 month 04 Mild disturbance up to 2 months 05 Mild disturbance more 06 Marked disturbance up to 1 week 07 Marked disturbance up to 1 month 08 Marked disturbance up to 2 months 09 Marked disturbance more 10 Several occasions + marked disturbance up to 1 month 11 Several occasions + marked disturbance greater than 2 months 12 Several occasions + mild disturbance up to 1 month
2/32	082	Does he ever make a fuss about going to school	- Not applicable 0 Never since last visit 1 Yes since last visit, never now 2 Yes since last visit, rarely now 3 Yes since last visit, sometimes now 4 Yes since last visit, usually now
2/34	083	Does he stay for school dinner	- Not applicable 0 Never since last visit 1 Yes since last visit, never now 2 Yes since last visit, rarely now 3 Yes since last visit, sometimes now 4 Yes since last visit, usually now

CARD/ COLUMN	VAR NO	TITLE	CODES
2/36	084	How did he take to school dinner	- Not applicable 0 No disturbance 1 Mild disturbance up to 1 week 2 Mild disturbance up to 1 month 3 Mild disturbance up to 2 months 4 Mild disturbance more 5 Marked disturbance up to 1 week 6 Marked disturbance up to 1 month 7 Marked disturbance up to 2 months 8 Marked disturbance more 9 Refusal, school dinner abandoned
2/38	085	Does he like school dinner now	- Not applicable 5 Marked displeasure 6 Some displeasure 7 Variable/doubtful 8 Likes on the whole 9 Definitely likes
2/40-48		School dinners made any difference at home (eating/ manners):	
2/40	086	Not applicable	1 Yes 0 Not mentioned
2/41	087	No change	1 Yes 0 Not mentioned
2/42	088	Better manners	1 Yes 0 Not mentioned
2/43	089	Worse manners	1 Yes 0 Not mentioned
2/44	090	Eats much worse/home	1 Yes 0 Not mentioned
2/45	091	Eats somewhat worse/home	1 Yes 0 Not mentioned
2/46	092	Variable/doubtful	1 Yes 0 Not mentioned
2/47	093	Eats somewhat better/home	1 Yes 0 Not mentioned
2/48	094	Eats much better/home	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
2/49	095	Teachers' men or women	- Not applicable 7 Both 8 Female 9 Male
2/51	096	Has there been any change of teacher since last visit	- No information 0 No 1 Mother "don't know" 7 One change 8 Two or more known changes 9 No constant teacher 1 term +
2/53	097	Effects of change of teacher on child	- Not applicable 0 Nil 1 Improvement 2 Mild disturbance up to 1 week 3 Mild disturbance up to 1 month 4 Mild disturbance up to 2 months 5 Mild disturbance more 6 Marked disturbance up to 1 week 7 Marked disturbance up to 1 month 8 Marked disturbance up to 2 months 9 Marked disturbance more
2/54	098	Has he often been absent	- No information 0 Nil 1 Up to 1 week 2 Up to 2 weeks 3 Up to 1 month 4 Up to 2 months 5 Up to 3 months 6 Up to 6 months 7 Up to 9 months 8 Whole school year
2/56	099	Effects on return to school	- Not applicable 0 Nil 1 Improvement 2 Mild disturbance up to 1 week 3 Mild disturbance up to 1 month 4 Mild disturbance up to 2 months 5 Mild disturbance more 6 Marked disturbance up to 1 week 7 Marked disturbance up to 1 month 8 Marked disturbance up to 2 months 9 Marked disturbance more

CARD/ COLUMN	VAR NO	TITLE	CODES
2/57	100	Are you always at home when he comes back from school, or is he looked after by someone else	- Not applicable 0 Always alone 1 Often alone 2 Alone occasionally/doubtful else with older child 3 Alone occasionally/doubtful else with mother or older child 4 Alone occasionally/doubtful else with mother or other adult 5 Alone occasionally/doubtful else with mother 6 Never alone with older child 7 Never alone with mother or older child 8 Never alone with mother or other adult 9 Never alone with mother
2/59	101	How have you been keeping, past year - now	- No information 0 Not well 1 Fairly well 2 Very well 3 Extremely well
2/61-71		How have you been keeping, past year - since last visit	
2/61	102	No information	1 Yes 0 Not mentioned
2/62	103	No illness	1 Yes 0 Not mentioned
2/63	104	Chronic/tiredness	1 Yes 0 Not mentioned
2/64	105	Chronic recurrant ailment	1 Yes 0 Not mentioned
2/65	106	Mild illness	1 Yes 0 Not mentioned
2/66	107	Marked illness up to 2 weeks	1 Yes 0 Not mentioned
2/67	108	Marked illness up to 1 month	1 Yes 0 Not mentioned
2/68	109	Marked illness more	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
2/69	110	"Nerves" at times	1 Yes 0 Not mentioned
2/70	111	Chronic "nerves"	1 Yes 0 Not mentioned
2/71	112	Chronic physical debility	1 Yes 0 Not mentioned
2/80		Card Number	2 Card 2
3/4-26		Have you had any difficulties with him	
3/4	113	No information	1 Yes 0 Not mentioned
3/5	114	None of these	1 Yes 0 Not mentioned
3/6	115	Other	1 Yes 0 Not mentioned
3/7	116	Speech	1 Yes 0 Not mentioned
3/8	117	Backwardness	1 Yes 0 Not mentioned
3/9	118	Misery	1 Yes 0 Not mentioned
3/10	119	Sleeping	1 Yes 0 Not mentioned
3/11	120	Feeding	1 Yes 0 Not mentioned
3/12	121	Elimination	1 Yes 0 Not mentioned
3/13	122	Toileting	1 Yes 0 Not mentioned
3/14	123	Habits	1 Yes 0 Not mentioned
3/16	124	No information	1 Yes 0 Not mentioned
3/17	125	None of these	1 Yes 0 Not mentioned
3/18	126	Anger	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
3/19	127	Stubborness	1 Yes 0 Not mentioned
3/20	128	Self-will	1 Yes 0 Not mentioned
3/21	129	Spiteful	1 Yes 0 Not mentioned
3/22	130	Fears	1 Yes 0 Not mentioned
3/23	131	Disobedience	1 Yes 0 Not mentioned
3/24	132	Shyness	1 Yes 0 Not mentioned
3/25	133	Showing off	1 Yes 0 Not mentioned
3/26	134	Dependence	1 Yes 0 Not mentioned
3/27	135	How has he been taking his food since last visit - now	- No information 0 Not well 1 Fairly well 2 Very well 3 Extremely well
3/29-39		Complaints about taking food since last visit	
3/29	136	Never satisfied	1 Yes 0 Not mentioned
3/30	137	Nil	1 Yes 0 Not mentioned
3/31	138	Other	1 Yes 0 Not mentioned
3/32	139	Distractable	1 Yes 0 Not mentioned
3/33	140	Poor appetite	1 Yes 0 Not mentioned
3/34	141	Faddy	1 Yes 0 Not mentioned
3/35	142	Won't finish	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
3/36	143	Messy	1 Yes 0 Not mentioned
3/37	144	Eats too quickly	1 Yes 0 Not mentioned
3/38	145	Eats too slowly	1 Yes 0 Not mentioned
3/39	146	Battle of wills	1 Yes 0 Not mentioned
3/41	147	Has he lost his appetite at any period	- No information 0 Nil 1 Less 2 Occasionally 3 Ceased, lasted 8-30 days 4 Ceased, lasted 31-90 days 5 Ceased, lasted more 6 Still, lasting 8-30 days 7 Still, lasting 31-90 days 8 Still, lasting more 9 All year
3/43	148	Are there any foods he consistently refused since last visit	1 Yes 0 No
3/44	149	Are there any foods he consistently refused since last visit - number	0 None 1 One 2 Two 3 Three 4 Four 5 Five 6 Six 7 Seven 8 Eight 9 Nine
3/46-56		Are there any foods he consistently refused since last visit - type	
3/46	150	Puddings	1 Yes 0 Not mentioned
3/47	151	Other	1 Yes 0 Not mentioned
3/48	152	Cereal	1 Yes 0 Not mentioned
3/49	153	Eggs	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
3/50	154	Potatoes	1 Yes 0 Not mentioned
3/51	155	Greens	1 Yes 0 Not mentioned
3/52	156	Meat	1 Yes 0 Not mentioned
3/53	157	Fish	1 Yes 0 Not mentioned
3/54	158	Bread	1 Yes 0 Not mentioned
3/55	159	Fruit	1 Yes 0 Not mentioned
3/56	160	Milk	1 Yes 0 Not mentioned
3/58-68		Are there any foods he consistently refused since last visit - methods (coax)	
3/58	161	No refusals	1 Yes 0 Not mentioned
3/59	162	Nil	1 Yes 0 Not mentioned
3/60	163	Other	1 Yes 0 Not mentioned
3/61	164	Give in other form	1 Yes 0 Not mentioned
3/62	165	Try later	1 Yes 0 Not mentioned
3/63	166	Coax (verbal encouragement)	1 Yes 0 Not mentioned
3/64	167	Verbal insistence	1 Yes 0 Not mentioned
3/65	168	Omit food he likes	1 Yes 0 Not mentioned
3/66	169	Threatens punishment	1 Yes 0 Not mentioned
3/67	170	Physical force	1 Yes 0 Not mentioned
3/68	171	Punishes (how)	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
3/70	172	Use of bottle (if not stopped at 4 years)	- No information 0 Nil 1 Used since last visit, not now 2 Used now once a day 3 Used now twice a day 4 Used now three times a day 5 Used now more
3/71	173	Response to weaning from bottle	- No weaning 0 Easy 1 Moderate 2 Difficult
3/73	174	Does he ever like to be helped with his food	- No information 0 Never 1 Rarely 2 Sometimes 3 Usually
3/80		Card Number	3 Card 3
4/4-13		Any other difficulty with feeding behaviour at meal time.	
4/4	175	No information	1 Yes 0 Not mentioned
4/5	176	Nil	1 Yes 0 Not mentioned
4/6	177	Other	1 Yes 0 Not mentioned
4/7	178	Capriciousness	1 Yes 0 Not mentioned
4/8	179	Distractable	1 Yes 0 Not mentioned
4/9	180	Faddy	1 Yes 0 Not mentioned
4/10	181	Messy	1 Yes 0 Not mentioned
4/11	182	Eats too quickly	1 Yes 0 Not mentioned
4/12	183	Eats too slowly	1 Yes 0 Not mentioned
4/13	184	Battle of wills	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
4/15	185	How has he been sleeping since last visit - now	- No information 0 Not well 1 Fairly well 2 Very well 3 Extremely well
4/17-27		Complaints about child's sleeping since last visit	
4/17	186	Several of these	1 Yes 0 Not mentioned
4/18	187	Other	1 Yes 0 Not mentioned
4/19	188	Poor day sleeper	1 Yes 0 Not mentioned
4/20	189	Resists going to bed	1 Yes 0 Not mentioned
4/21	190	Restless	1 Yes 0 Not mentioned
4/22	191	Wakeful evenings	1 Yes 0 Not mentioned
4/23	192	Talks in sleep	1 Yes 0 Not mentioned
4/24	193	Wakeful (not crying)	1 Yes 0 Not mentioned
4/25	194	Wakeful with crying	1 Yes 0 Not mentioned
4/26	195	Bad dreams/night terrors	1 Yes 0 Not mentioned
4/27	196	Sleep walking	1 Yes 0 Not mentioned
4/28	197	Hours slept by day	- No information 0 Nil 1 Days per week less 2 Days per week 3-5 3 Days per week 6-7 4 Average less 5 Average ½ hour 6 Average 1 hour 7 Average 2 hours 8 Average 3 hours 9 Average more

CARD/ COLUMN	VAR NO	TITLE	CODES
4/29	198	Hours slept by night	- No information 0 Less than 8 hours 1 8 hours 2 9 hours 3 10 hours 4 11 hours 5 12 hours 6 13 hours 7 14 hours 8 15 hours 9 More than 15 hours
4/30	199	Total hours slept	- No information 0 Less than 8 hours 1 8 hours 2 9 hours 3 10 hours 4 11 hours 5 12 hours 6 13 hours 7 14 hours 8 15 hours 9 More than 15 hours
4/31	200	Regularity of hours slept	- No information 0 Very irregular 1 Some variation 2 Very regular
4/33-40		Does he take anything to bed or have rituals (things he really must do)	
4/33	201	Other marked rituals	1 Yes 0 Not mentioned
4/34	202	No	1 Yes 0 Not mentioned
4/35	203	Different things rarely	1 Yes 0 Not mentioned
4/36	204	Different things sometimes	1 Yes 0 Not mentioned
4/37	205	Different things usually	1 Yes 0 Not mentioned
4/38	206	Always same rarely	1 Yes 0 Not mentioned
4/39	207	Always same sometimes	1 Yes 0 Not mentioned
4/40	208	Always same usually	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
4/41	209	Does he take anything to bed or have rituals (things he really must do)	1 Sucks finger regularly 0 Does not suck finger
4/42	210	Does he take anything to bed or have rituals (things he really must do)	0 Cuddles never since last visit 1 Cuddles yes since last visit now never 2 Cuddles yes since last visit now rarely 3 Cuddles yes since last visit now sometimes 4 Cuddles yes since last visit now usually
4/43	211	Does he take anything to bed or have rituals (things he really must do)	5 Other sucking never since last visit 6 Other sucking yes since last visit, now never 7 Other sucking yes since last visit, now rarely 8 Other sucking yes since last visit, now sometimes 9 Other sucking yes since last visit, now usually
4/45	212	Have you had any trouble getting him off to bed, or off to sleep. Resists preparation - now	- No information 0 Never 1 Rarely 2 Sometimes 3 Usually
4/47	213	Have you had any trouble getting him off to bed, or off to sleep. Resists preparation since last visit	- No information 0 Never 1 Occasionally 2 Periods less 3 Periods 1-2 months 4 Periods 2-6 months 5 More 6 Whole year
4/49	214	Have you had any trouble getting him off to bed or off to sleep. Demands attention in evening - now	- No information 0 Never 1 Rarely 2 Sometimes 3 Usually

CARD/ COLUMN	VAR NO	TITLE	CODES
4/51	215	Have you had any trouble getting him off to bed or off to sleep. Demands attention in evening - since last visit	␣ No information 0 Never 1 Occasionally 2 Periods less 3 Periods 1-2 months 4 Periods 2-6 months 5 More 6 Whole year
4/53-57		Have you had any troubles getting him off to bed or off to sleep. Demands attention in evening - how.	
4/53	216	Never	1 Yes 0 Not mentioned
4/54	217	Other	1 Yes 0 Not mentioned
4/55	218	Coming out	1 Yes 0 Not mentioned
4/56	219	Calling	1 Yes 0 Not mentioned
4/57	220	Crying	1 Yes 0 Not mentioned
4/59-69		Have you had any trouble getting him off to bed or off to sleep. Method tried.	
4/59	221	No trouble	1 Yes 0 Not mentioned
4/60	222	Other	1 Yes 0 Not mentioned
4/61	223	Nurse	1 Yes 0 Not mentioned
4/62	224	Stay with child	1 Yes 0 Not mentioned
4/63	225	Bring in living room	1 Yes 0 Not mentioned
4/64	226	Keep up till sleepy	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
4/65	227	Toileting/drink	1 Yes 0 Not mentioned
4/66	228	Talk to child	1 Yes 0 Not mentioned
4/67	229	Ignore	1 Yes 0 Not mentioned
4/68	230	Scold	1 Yes 0 Not mentioned
4/69	231	Smack	1 Yes 0 Not mentioned
4/71	232	Waking since last visit, never and less - total duration	- Nil 1 Up to 1 week 2 Up to 2 weeks 3 Up to 1 month 4 Up to 2 months 5 Up to 3 months 6 Up to 6 months 7 Up to 9 months 8 Between 9 and 12 months 9 12 months
4/73	233	Waking since last visit, once or twice a week - total duration	- Nil 1 Up to 1 week 2 Up to 2 weeks 3 Up to 1 month 4 Up to 2 months 5 Up to 3 months 6 Up to 6 months 7 Up to 9 months 8 Between 9 and 12 months 9 12 months
4/74	234	Waking since last visit, three to six times a week - total duration	- Nil 1 Up to 1 week 2 Up to 2 weeks 3 Up to 1 month 4 Up to 2 months 5 Up to 3 months 6 Up to 6 months 7 Up to 9 months 8 Between 9 and 12 months 9 12 months

CARD/ COLUMN	VAR NO	TITLE	CODES
4/76	235	Waking since last visit, nightly or more - total duration	- Nil 1 Up to 1 week 2 Up to 2 weeks 3 Up to 1 month 4 Up to 2 months 5 Up to 3 months 6 Up to 6 months 7 Up to 9 months 8 Between 9 and 12 months 9 12 months
4/80		Card Number	4 Card 4
5/4-12		When child wakes in the night	
5/4	236	Not applicable	1 Yes 0 Not mentioned
5/5	237	Other	1 Yes 0 Not mentioned
5/6	238	Cheerful	1 Yes 0 Not mentioned
5/7	239	For drink	1 Yes 0 Not mentioned
5/8	240	For toilet	1 Yes 0 Not mentioned
5/9	241	Physical discomfort	1 Yes 0 Not mentioned
5/10	242	Just wants attention	1 Yes 0 Not mentioned
5/11	243	Upset	1 Yes 0 Not mentioned
5/12	244	Frightened	1 Yes 0 Not mentioned
5/14-24		If wakes, methods tried.	
5/14	245	Not applicable	1 Yes 0 Not mentioned
5/15	246	Other	1 Yes 0 Not mentioned
5/16	247	Drink	1 Yes 0 Not mentioned
5/17	248	Cover up/change	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
5/18	249	Talk to child	1 Yes 0 Not mentioned
5/19	250	Stay with child	1 Yes 0 Not mentioned
5/20	251	Nursing	1 Yes 0 Not mentioned
5/21	252	Ignore	1 Yes 0 Not mentioned
5/22	253	Scold	1 Yes 0 Not mentioned
5/23	254	Punish	1 Yes 0 Not mentioned
5/24	255	Parents' bed	1 Yes 0 Not mentioned
5/25-35		If wakes, methods tried effective 50% or more:	
5/25	256	Not applicable	1 Yes 0 Not mentioned
5/26	257	Other	1 Yes 0 Not mentioned
5/27	258	Drink	1 Yes 0 Not mentioned
5/28	259	Cover up/change	1 Yes 0 Not mentioned
5/29	260	Talk to child	1 Yes 0 Not mentioned
5/30	261	Stay with child	1 Yes 0 Not mentioned
5/31	262	Nursing	1 Yes 0 Not mentioned
5/32	263	Ignore	1 Yes 0 Not mentioned
5/33	264	Scold	1 Yes 0 Not mentioned
5/34	265	Punish	1 Yes 0 Not mentioned
5/35	266	Parents' bed	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
5/37	267	Shares room with	- No information 0 None 1 Other 2 One sibling 3 More siblings 4 Mother 5 Father 6 Mother and father 7 Father and siblings 8 Mother and siblings 9 Mother and father and siblings
5/39-40	268	Shares bed with	00 None 01 Other 02 One sibling 03 More siblings 04 Mother 05 Father 06 Mother and father 07 Father and siblings 08 Mother and siblings 09 Mother and father and siblings 12 Variable, alone or with siblings 14 Variable, alone or with mother
5/42	269	Does he ever sleep in your bed	0 Never 1 Less 2 Odd periods 3 Once a month or more once or twice a week formerly 4 Once a month or more once or twice a week still 5 Once a month or more several times a week formerly 6 Once a month or more several times a week still 7 Once a month or more nightly formerly 8 Once a month or more· nightly still 9 Once a month or more always
5/44-50		Does he ever sleep in your bed - circumstances:	
5/44	270	Nil	1 Yes 0 Not mentioned
5/45	271	Other	1 Yes 0 Not mentioned
5/46	272	On holiday/visitors, etc.	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
5/47	273	Child ill	1 Yes 0 Not mentioned
5/48	274	Father away	1 Yes 0 Not mentioned
5/49	275	At child's request	1 Yes 0 Not mentioned
5/50	276	Accepted practice	1 Yes 0 Not mentioned
5/52	277	Does he ever dream	- No information 0 Nil 1 Less 2 Once a month plus 3 Once a week plus 4 Almost nightly
5/54	278	What does he say in his sleep, etc.	- Never dreams 0 Never bad 1 Bad dreams less 2 Bad dreams 1 month plus 3 Bad dreams 1 week plus
5/55	279	What does he say in his sleep, etc.	4 Nightmares. less 5 Nightmares 1 month plus 6 Nightmares 1 week plus
5/56	280	What does he say in his sleep, etc.	7 Night terrors less 8 Night terrors 1 month plus 9 Night terrors 1 week plus
5/58	281	Any other sleeping problems	- No information 0 Nil 1 Other 2 Other and restless 8 Restless 9 Sleep walking
5/59-68		Any difficulties with bowels or bladder since last visit.	
5/59	282	No information	1 Yes 0 Not mentioned
5/60	283	Nil	1 Yes 0 Not mentioned
5/61	284	Other	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
5/62	285	Diarrhoea	1 Yes 0 Not mentioned
5/63	286	Constipation	1 Yes 0 Not mentioned
5/64	287	Bladder incontinence	1 Yes 0 Not mentioned
5/65	288	Refuses pot	1 Yes 0 Not mentioned
5/66	289	Bowel incontinence	1 Yes 0 Not mentioned
5/67	290	Retention of urine	1 Yes 0 Not mentioned
5/68	291	Retention of faeces	1 Yes 0 Not mentioned
5/70-75		Has he been constipated since last visit	
5/70	292	No information	1 Yes 0 Not mentioned
5/71	293	No	1 Yes 0 Not mentioned
5/72	294	Yes infrequency	1 Yes 0 Not mentioned
5/73	295	Hard stools	1 Yes 0 Not mentioned
5/74	296	Difference in defaecation	1 Yes 0 Not mentioned
5/75	297	Pain on defaecation	1 Yes 0 Not mentioned
5/77	298	Constipation - number of attacks	- Never 2 1 or 2 3 Several times 4 Monthly 5 More 6 Chronic· 1 month plus 7 Chronic 3 months plus 8 Chronic. 6 months plus 9 Chronic all year
5/80		Card Number	5 Card 5

CARD/ COLUMN	VAR NO	TITLE	CODES
6/4-14		Constipation. methods tried.	
6/4	299	Never constipated	1 Yes 0 Not mentioned
6/5	300	Nil	1 Yes 0 Not mentioned
6/6	301	Dietary	1 Yes 0 Not mentioned
6/7	302	Laxative. pleasure/neutral	1 Yes 0 Not mentioned
6/8	303	Laxative displeasure	1 Yes 0 Not mentioned
6/9	304	Suppository pleasure	1 Yes 0 Not mentioned
6/10	305	Suppository neutral	1 Yes 0 Not mentioned
6/11	306	Suppository displeasure	1 Yes 0 Not mentioned
6/12	307	Enema pleasure	1 Yes 0 Not mentioned
6/13	308	Enema neutral	1 Yes 0 Not mentioned
6/14	309	Enema displeasure	1 Yes 0 Not mentioned
6/16	310	Is he 100% clean with his bowels. Proporation of motions caught now	- No information 0 Nil 1 Under 30% 2 30-70% 3 70-95% 4 95-100% 5 95-100% (when out only) 6 Soils now (diarrhoea) normally 100% 7 100% now soiling period since last visit 8 100% now occasionally since last visit 9 100% now and since last visit

CARD/ COLUMN	VAR NO	TITLE	CODES
6/18	311	Is child dry now by day	- No information 0 Never dry 4 Rarely dry 5 Sometimes dry 6 Usually dry 7 Practically always, wetting period since last visit 8 Practically always, wetting occasionally since last visit
6/19	312	Is child dry now by night	- No information 0 Never dry 4 Rarely dry 5 Sometimes dry 6 Usually dry 7 Practically always, wetting period since last visit 8 Practically always, wetting occasionally since last visit
6/21-31		Child's response to lapses, soiling	
6/21	313	No lapses	1 Yes 0 Not mentioned
6/22	314	Nil	1 Yes 0 Not mentioned
6/23	315	Other	1 Yes 0 Not mentioned
6/24	316	Tells mother	1 Yes 0 Not mentioned
6/25	317	Blames others	1 Yes 0 Not mentioned
6/26	318	Clears up	1 Yes 0 Not mentioned
6/27	319	Hides mess	1 Yes 0 Not mentioned
6/28	320	Avoids adults	1 Yes 0 Not mentioned
6/29	321	Frightened	1 Yes 0 Not mentioned
6/30	322	Looks guilty	1 Yes 0 Not mentioned
6/31	323	Upset	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
6/33-43		Child's response to lapses, wetting	
6/33	324	No lapses	1 Yes 0 Not mentioned
6/34	325	Nil	1 Yes 0 Not mentioned
6/35	326	Other	1 Yes 0 Not mentioned
6/36	327	Tells mother	1 Yes 0 Not mentioned
6/37	328	Blames others	1 Yes 0 Not mentioned
6/38	329	Clears up	1 Yes 0 Not mentioned
6/39	330	Hides mess	1 Yes 0 Not mentioned
6/40	331	Avoids adults	1 Yes 0 Not mentioned
6/41	332	Frightened	1 Yes 0 Not mentioned
6/42	333	Looks guilty	1 Yes 0 Not mentioned
6/43	334	Upset	1 Yes 0 Not mentioned
6/45-54		Method of handling lapses, soiling	
6/45	335	No lapses	1 Yes 0 Not mentioned
6/46	336	Nil	1 Yes 0 Not mentioned
6/47	337	Other	1 Yes 0 Not mentioned
6/48	338	Mild verbal disapproval	1 Yes 0 Not mentioned
6/49	339	Shames	1 Yes 0 Not mentioned
6/50	340	Threats	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
6/51	341	Make child wipe up	1 Yes 0 Not mentioned
6/52	342	Other punishment	1 Yes 0 Not mentioned
6/53	343	Smacks	1 Yes 0 Not mentioned
6/54	344	Rubs nose in it	1 Yes 0 Not mentioned
6/56-65		Method of handling lapses, wetting	
6/56	345	No lapses	1 Yes 0 Not mentioned
6/57	346	Nil	1 Yes 0 Not mentioned
6/58	347	Other	1 Yes 0 Not mentioned
6/59	348	Mild verbal disapproval	1 Yes 0 Not mentioned
6/60	349	Shames	1 Yes 0 Not mentioned
6/61	350	Threats	1 Yes 0 Not mentioned
6/62	351	Make child wipe up	1 Yes 0 Not mentioned
6/63	352	Other punishment	1 Yes 0 Not mentioned
6/64	353	Smacks	1 Yes 0 Not mentioned
6/65	354	Rubs nose in it	1 Yes 0 Not mentioned
6/67	355	Lifted at night between certain ages	- No information 0 Never since last visit 5 Only if wakes 6 Wakened never, yes since last visit 7 Wakened rarely, yes since last visit 8 Wakened sometimes, yes since last visit 9 Wakened usually, yes since last visit

CARD/ COLUMN	VAR NO	TITLE	CODES
6/69-73		Do you ever have to help him at the toilet	
6/69	356	No information	1 Yes 0 Not mentioned
6/70	357	No	1 Yes 0 Not mentioned
6/71	358	Other	1 Yes 0 Not mentioned
6/72	359	Buttons	1 Yes 0 Not mentioned
6/73	360	Wiping bottom	1 Yes 0 Not mentioned
6/80		Card Number	6 Card 6
7/4-10		Other elimination problems mentioned.	
7/4	361	No information	1 Yes 0 Not mentioned
7/5	362	Nil	1 Yes 0 Not mentioned
7/6	363	Other	1 Yes 0 Not mentioned
7/7	364	Diarrhoea	1 Yes 0 Not mentioned
7/8	365	Retention of urine	1 Yes 0 Not mentioned
7/9	366	Retention of faeces	1 Yes 0 Not mentioned
7/10	367	Refuses pot	1 Yes 0 Not mentioned
7/16	368	Do you ever see him sucking fingers Past 4 weeks, times per day	4 Never 5 Less 6 1 or 2 7 Several 8 Many

CARD/ COLUMN	VAR NO	TITLE	CODES
7/17	369	Do you ever see him nail-biting. Past 4 weeks, times per day	4 Never 5 Less 6 1 or 2 7 Several 8 Many
7/18	370	Do you ever see him suck, chew, bite, other. Past 4 weeks, times per day	4 Never 5 Less 6 1 or 2 7 Several 8 Many
7/19	371	Do you ever see him picking, scratching. Where? Past 4 weeks, times per day	4 Never 5 Less 6 1 or 2 7 Several 8 Many
7/20	372	Do you ever see him nose-picking. Past 4 weeks, times per day	4 Never 5 Less 6 1 or 2 7 Several 8 Many
7/21	373	Do you ever see him play with privates. Past 4 weeks, times per day	4 Never 5 Less 6 1 or 2 7 Several 8 Many
7/22	374	Do you ever see him nervous movement, grimace, blink, twitch, make faces, etc. Past 4 weeks, times per day	4 Never 5 Less 6 1 or 2 7 Several 8 Many
7/23-28		Do you ever see him do other habit (specify):	
7/23	375	Past 4 weeks, never	1 Yes 0 Not mentioned
7/24	376	Past 4 weeks, less per day	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
7/25	377	Past 4 weeks, 1-2 times per day	1 Yes 0 Not mentioned
7/26	378	Past 4 weeks, several times per day	1 Yes 0 Not mentioned
7/27	379	Past 4 weeks, many times per day	1 Yes 0 Not mentioned
7/28	380	Two or more habits	1 Yes 0 Not mentioned
7/29	381	Do you ever see him sucking fingers since last visit	0 Never 2 Occasionally 3 Definite habit
7/30	382	Do you ever see him nail-biting since last visit	0 Never 2 Occasionally 3 Definite habit
7/31	383	Do you ever see him suck, chew, bite, other since last visit	0 Never 2 Occasionally 3 Definite habit
7/32	384	Do you ever see him picking, scratching since last visit	0 Never 2 Occasionally 3 Definite habit
7/33	385	Do you ever see him nose-picking since last visit	0 Never 2 Occasionally 3 Definite habit
7/34	386	Do you ever see him play with privates since last visit	0 Never 2 Occasionally 3 Definite habit
7/35	387	Do you ever see him nervous movement, grimace, blink, twitch, make faces, etc. since last visit	0 Never 2 Occasionally 3 Definite habit
7/36	388	Do you ever see him other habit since last visit	0 Never 2 Occasionally 3 Definite habit

CARD/ COLUMN	VAR NO	TITLE	CODES
7/44-50		Do you ever see him sucking fingers - what done.	
7/44	389	Nil	1 Yes 0 Not mentioned
7/45	390	Other	1 Yes 0 Not mentioned
7/46	391	Remove	1 Yes 0 Not mentioned
7/47	392	Reproach	1 Yes 0 Not mentioned
7/48	393	Smack rarely	1 Yes 0 Not mentioned
7/49	394	Smack sometimes	1 Yes 0 Not mentioned
7/50	395	Smack usually	1 Yes 0 Not mentioned
7/51-57		Do you ever see him nail-biting - what done.	
7/51	396	Nil	1 Yes 0 Not mentioned
7/52	397	Other	1 Yes 0 Not mentioned
7/53	398	Remove	1 Yes 0 Not mentioned
7/54	399	Reproach	1 Yes 0 Not mentioned
7/55	400	Smack rarely	1 Yes 0 Not mentioned
7/56	401	Smack sometimes	1 Yes 0 Not mentioned
7/57	402	Smack usually	1 Yes 0 Not mentioned
7/58-64		Do you ever see him suck, chew, bite other - what done	
7/58	403	Nil	1 Yes 0 Not mentioned
7/59	404	Other	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
7/60	405	Remove	1 Yes 0 Not mentioned
7/61	406	Reproach	1 Yes 0 Not mentioned
7/62	407	Smack rarely	1 Yes 0 Not mentioned
7/63	408	Smack sometimes	1 Yes 0 Not mentioned
7/64	409	Smack usually	1 Yes 0 Not mentioned
7/65-71		Do you ever see him picking, scratching, where - what done·	
7/65	410	Nil	1 Yes 0 Not mentioned
7/66	411	Other	1 Yes 0 Not mentioned
7/67	412	Remove	1 Yes 0 Not mentioned
7/68	413	Reproach	1 Yes 0 Not mentioned
7/69	414	Smack rarely	1 Yes 0 Not mentioned
7/70	415	Smack sometimes	1 Yes 0 Not mentioned
7/71	416	Smack usually	1 Yes 0 Not mentioned
7/72-78		Do you ever see him nose-picking - what done	
7/72	417	Nil	1 Yes 0 Not mentioned
7/73	418	Other	1 Yes 0 Not mentioned
7/74	419	Remove	1 Yes 0 Not mentioned
7/75	420	Reproach	1 Yes 0 Not mentioned
7/76	421	Smack rarely	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
7/77	422	Smack sometimes	1 Yes 0 Not mentioned
7/78	423	Smack usually	1 Yes 0 Not mentioned
7/80		Card Number	7 Card 7
8/4-10		Do you ever see him play with privates - what done:	
8/4	424	Nil	1 Yes 0 Not mentioned
8/5	425	Other	1 Yes 0 Not mentioned
8/6	426	Remove	1 Yes 0 Not mentioned
8/7	427	Reproach	1 Yes 0 Not mentioned
8/8	428	Smack rarely	1 Yes 0 Not mentioned
8/9	429	Smack sometimes	1 Yes 0 Not mentioned
8/10	430	Smack usually	1 Yes 0 Not mentioned
8/11-17		Do you ever see him nervous movement, grimace, blink, twitch, make faces, etc. - what done.	
8/11	431	Nil	1 Yes 0 Not mentioned
8/12	432	Other	1 Yes 0 Not mentioned
8/13	433	Remove	1 Yes 0 Not mentioned
8/14	434	Reproach	1 Yes 0 Not mentioned
8/15	435	Smack rarely	1 Yes 0 Not mentioned
8/16	436	Smack sometimes	1 Yes 0 Not mentioned
8/17	437	Smack usually	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
8/18-24		Do you ever see him do other habit - what done	
8/18	438	Nil	1 Yes 0 Not mentioned
8/19	439	Other	1 Yes 0 Not mentioned
8/20	440	Remove	1 Yes 0 Not mentioned
8/21	441	Reproach	1 Yes 0 Not mentioned
8/22	442	Smack rarely	1 Yes 0 Not mentioned
8/23	443	Smack sometimes	1 Yes 0 Not mentioned
8/24	444	Smack usually	1 Yes 0 Not mentioned
8/35-39		Is he afraid of animals:	
8/35	445	Shown no particular opportunity	1 Yes 0 Not mentioned
8/36	446	Shown still	1 Yes 0 Not mentioned
8/37	447	Shown never	1 Yes 0 Not mentioned
8/38	448	Shown once or twice	1 Yes 0 Not mentioned
8/39	449	Shown more	1 Yes 0 Not mentioned
8/40-44		Is he afraid of noises	
8/40	450	Shown no particular opportunity	1 Yes 0 Not mentioned
8/41	451	Shown still	1 Yes 0 Not mentioned
8/42	452	Shown never	1 Yes 0 Not mentioned
8/43	453	Shown once or twice	1 Yes 0 Not mentioned
8/44	454	Shown more	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
8/45-49		Is he afraid of storms	
8/45	455	Shown no particular opportunity	1 Yes 0 Not mentioned
8/46	456	Shown still	1 Yes 0 Not mentioned
8/47	457	Shown never	1 Yes 0 Not mentioned
8/48	458	Shown once or twice	1 Yes 0 Not mentioned
8/49	459	Shown more	1 Yes 0 Not mentioned
8/50-54		Is he afraid of the dark	
8/50	460	Shown no particular opportunity	1 Yes 0 Not mentioned
8/51	461	Shown still	1 Yes 0 Not mentioned
8/52	462	Shown never	1 Yes 0 Not mentioned
8/53	463	Shown once or twice	1 Yes 0 Not mentioned
8/54	464	Shown more	1 Yes 0 Not mentioned
8/55-59		Is he afraid of imaginary creatures (e.g. bogeymen).	
8/55	465	Shown no particular opportunity	1 Yes 0 Not mentioned
8/56	466	Shown still	1 Yes 0 Not mentioned
8/57	467	Shown never	1 Yes 0 Not mentioned
8/58	468	Shown once or twice	1 Yes 0 Not mentioned
8/59	469	Shown more	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
8/60-64		Is he afraid in water	
8/60	470	Shown no particular opportunity	1 Yes 0 Not mentioned
8/61	471	Shown still	1 Yes 0 Not mentioned
8/62	472	Shown never	1 Yes 0 Not mentioned
8/63	473	Shown once or twice	1 Yes 0 Not mentioned
8/64	474	Shown more	1 Yes 0 Not mentioned
8/65-69		Is he afraid of stories	
8/65	475	Shown no particular opportunity	1 Yes 0 Not mentioned
8/66	476	Shown still	1 Yes 0 Not mentioned
8/67	477	Shown never	1 Yes 0 Not mentioned
8/68	478	Shown once or twice	1 Yes 0 Not mentioned
8/69	479	Shown more	1 Yes 0 Not mentioned
8/70-74		Is he afraid of coloured people:	
8/70	480	Shown no particular opportunity	1 Yes 0 Not mentioned
8/71	481	Shown still	1 Yes 0 Not mentioned
8/72	482	Shown never	1 Yes 0 Not mentioned
8/73	483	Shown once or twice	1 Yes 0 Not mentioned
8/74	484	Shown more	1 Yes 0 Not mentioned
8/80		Card Number	8 Card 8

CARD/ COLUMN	VAR NO	TITLE	CODES
9/4-8		Is he afraid of blood.	
9/4	485	Shown no particular opportunity	1 Yes 0 Not mentioned
9/5	486	Shown still	1 Yes 0 Not mentioned
9/6	487	Shown never	1 Yes 0 Not mentioned
9/7	488	Shown once or twice	1 Yes 0 Not mentioned
9/8	489	Shown more	1 Yes 0 Not mentioned
9/9-13		Is he afraid of other:	
9/9	490	Shown no particular opportunity	1 Yes 0 Not mentioned
9/10	491	Shown still	1 Yes 0 Not mentioned
9/11	492	Shown never	1 Yes 0 Not mentioned
9/12	493	Shown once or twice	1 Yes 0 Not mentioned
9/13	494	Shown more	1 Yes 0 Not mentioned
9/14-18		Is he afraid of anything on television.	
9/14	495	Shown no particular opportunity	1 Yes 0 Not mentioned
9/15	496	Shown still	1 Yes 0 Not mentioned
9/16	497	Shown never	1 Yes 0 Not mentioned
9/17	498	Shown once or twice	1 Yes 0 Not mentioned
9/18	499	Shown more	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
9/19-24		Is he afraid of animals - what done	
9/19	500	Variable	1 Yes 0 Not mentioned
9/20	501	Usually other	1 Yes 0 Not mentioned
9/21	502	Usually comfort	1 Yes 0 Not mentioned
9/22	503	Usually reassure	1 Yes 0 Not mentioned
9/23	504	Usually tease	1 Yes 0 Not mentioned
9/24	505	Usually force	1 Yes 0 Not mentioned
9/25-30		Is he afraid of noises - what done	
9/25	506	Variable	1 Yes 0 Not mentioned
9/26	507	Usually other	1 Yes 0 Not mentioned
9/27	508	Usually comfort	1 Yes 0 Not mentioned
9/28	509	Usually reassure	1 Yes 0 Not mentioned
9/29	510	Usually tease	1 Yes 0 Not mentioned
9/30	511	Usually force	1 Yes 0 Not mentioned
9/31-36		Is he afraid of storms - what done.	
9/31	512	Variable	1 Yes 0 Not mentioned
9/32	513	Usually other	1 Yes 0 Not mentioned
9/33	514	Usually comfort	1 Yes 0 Not mentioned
9/34	515	Usually reassure	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
9/35	516	Usually tease	1 Yes 0 Not mentioned
9/36	517	Usually force	1 Yes 0 Not mentioned
9/37-42		Is he afraid of the dark - what done	
9/37	518	Variable	1 Yes 0 Not mentioned
9/38	519	Usually other	1 Yes 0 Not mentioned
9/39	520	Usually comfort	1 Yes 0 Not mentioned
9/40	521	Usually reassure	1 Yes 0 Not mentioned
9/41	522	Usually tease	1 Yes 0 Not mentioned
9/42	523	Usually force	1 Yes 0 Not mentioned
9/43-48		Is he afraid of imaginary creatures (e.g. bogeymen) - what done:	
9/43	524	Variable	1 Yes 0 Not mentioned
9/44	525	Usually other	1 Yes 0 Not mentioned
9/45	526	Usually comfort	1 Yes 0 Not mentioned
9/46	527	Usually reassure	1 Yes 0 Not mentioned
9/47	528	Usually tease	1 Yes 0 Not mentioned
9/48	529	Usually force	1 Yes 0 Not mentioned
9/49-54		Is he afraid in water - what done	
9/49	530	Variable	1 Yes 0 Not mentioned
9/50	531	Usually other	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
9/51	532	Usually comfort	1 Yes 0 Not mentioned
9/52	533	Usually reassure	1 Yes 0 Not mentioned
9/53	534	Usually tease	1 Yes 0 Not mentioned
9/54	535	Usually force	1 Yes 0 Not mentioned
9/55-60		Is he afraid of stories - what done	
9/55	536	Variable	1 Yes 0 Not mentioned
9/56	537	Usually other	1 Yes 0 Not mentioned
9/57	538	Usually comfort	1 Yes 0 Not mentioned
9/58	539	Usually reassure	1 Yes 0 Not mentioned
9/59	540	Usually tease	1 Yes 0 Not mentioned
9/60	541	Usually force	1 Yes 0 Not mentioned
9/61-66		Is he afraid of coloured people - what done:	
9/61	542	Variable	1 Yes 0 Not mentioned
9/62	543	Usually other	1 Yes 0 Not mentioned
9/63	544	Usually comfort	1 Yes 0 Not mentioned
9/64	545	Usually reassure	1 Yes 0 Not mentioned
9/65	546	Usually tease	1 Yes 0 Not mentioned
9/66	547	Usually force	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
9/67-72		Is he afraid of blood - what done·	
9/67	548	Variable	1 Yes 0 Not mentioned
9/68	549	Usually other	1 Yes 0 Not mentioned
9/69	550	Usually comfort	1 Yes 0 Not mentioned
9/70	551	Usually reassure	1 Yes 0 Not mentioned
9/71	552	Usually tease	1 Yes 0 Not mentioned
9/72	553	Usually force	1 Yes 0 Not mentioned
9/73-78		Is he afraid of other - what done.	
9/73	554	Variable	1 Yes 0 Not mentioned
9/74	555	Usually other	1 Yes 0 Not mentioned
9/75	556	Usually comfort	1 Yes 0 Not mentioned
9/76	557	Usually reassure	1 Yes 0 Not mentioned
9/77	558	Usually tease	1 Yes 0 Not mentioned
9/78	559	Usually force	1 Yes 0 Not mentioned
9/80		Card Number	9 Card 9
10/4-9		Is he afraid of anything on television - what done·	
10/4	560	Variable	1 Yes 0 Not mentioned
10/5	561	Usually other	1 Yes 0 Not mentioned
10/6	562	Usually comfort	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
10/7	563	Usually reassure	1 Yes 0 Not mentioned
10/8	564	Usually tease	1 Yes 0 Not mentioned
10/9	565	Usually force	1 Yes 0 Not mentioned
10/11	566	Cinema. seen	7 Nil 8 Occasionally 9 Regularly
10/12	567	Television seen	0 Nil 1 Occasionally 2 Regularly
10/13	568	Total number of fears in the year	- No information 0 None 1 One 2 Two 3 Three 4 Four 5 Five 6 Six 7 Seven 8 Eight 9 Nine or more
10/15	569	When he's playing, does he do any of these things - dress up like woman	- No information 0 No 1 Only on suggestion 2 Occasionally 3 Yes
10/17	570	When he's playing, does he do any of these things - dress up like man	- No information 0 No 1 Only on suggestion 2 Occasionally 3 Yes
10/19	571	When he's playing, does he do any of these things - women's jobs	- No information 0 No 1 Only on suggestion 2 Occasionally 3 Yes
10/20	572	When he's playing, does he do any of these things - man's job	- No information 0 No 1 Only on suggestion 2 Occasionally 3 Yes

CARD/ COLUMN	VAR NO	TITLE	CODES
10/21	573	When he's playing, does he do any of these things - driving trains, cars, etc.	- No information 0 No 1 Only on suggestion 2 Occasionally 3 Yes
10/23	574	When he's playing, does he do any of these things - looking after dolls	- No information 0 No 1 Only on suggestion 2 Occasionally 3 Yes
10/25	575	When he's playing, does he do any of these things - fighting games, cowboys, rough and tumbling	- No information 0 No 1 Only on suggestion 2 Occasionally 3 Yes
10/27	576	Any other make-believe games (house, school, hospital)	- No information 0 Nil 8 Little 9 Many
10/28-32		Does he do any of these things either in summer or winter - sand, earth.	
10/28	577	Little opportunity	1 Yes 0 Not mentioned
10/29	578	Nil	1 Yes 0 Not mentioned
10/30	579	Occasionally	1 Yes 0 Not mentioned
10/31	580	Yes	1 Yes 0 Not mentioned
10/32	581	Marked interest	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
10/33-37		Does he do any of these things either in summer or winter - dough, plasticine	
10/33	582	Little opportunity	1 Yes 0 Not mentioned
10/34	583	Nil	1 Yes 0 Not mentioned
10/35	584	Occasionally	1 Yes 0 Not mentioned
10/36	585	Yes	1 Yes 0 Not mentioned
10/37	586	Marked interest	1 Yes 0 Not mentioned
10/39-43		Does he do any of these things either in summer or winter - water (not bath)	
10/39	587	Little opportunity	1 Yes 0 Not mentioned
10/40	588	Nil	1 Yes 0 Not mentioned
10/41	589	Occasionally	1 Yes 0 Not mentioned
10/42	590	Yes	1 Yes 0 Not mentioned
10/43	591	Marked interest	1 Yes 0 Not mentioned
10/44-48		Does he do any of these things either in summer or winter - drawing	
10/44	592	Little opportunity	1 Yes 0 Not mentioned
10/45	593	Nil	1 Yes 0 Not mentioned
10/46	594	Occasionally	1 Yes 0 Not mentioned
10/47	595	Yes	1 Yes 0 Not mentioned
10/48	596	Marked interest	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
10/50-54		Does he do any of these things either in summer or winter - painting:	
10/50	597	Little opportunity	1 Yes 0 Not mentioned
10/51	598	Nil	1 Yes 0 Not mentioned
10/52	599	Occasionally	1 Yes 0 Not mentioned
10/53	600	Yes	1 Yes 0 Not mentioned
10/54	601	Marked interest	1 Yes 0 Not mentioned
10/56-60		Does he do any of these things either in summer or winter - bricks, construction toys	
10/56	602	Little opportunity	1 Yes 0 Not mentioned
10/57	603	Nil	1 Yes 0 Not mentioned
10/58	604	Occasionally	1 Yes 0 Not mentioned
10/59	605	Yes	1 Yes 0 Not mentioned
10/60	606	Marked interest	1 Yes 0 Not mentioned
10/62-66		Does he do any of these things either in summer or winter - ride wheel toys	
10/62	607	Little opportunity	1 Yes 0 Not mentioned
10/63	608	Nil	1 Yes 0 Not mentioned
10/64	609	Occasionally	1 Yes 0 Not mentioned
10/65	610	Yes	1 Yes 0 Not mentioned
10/66	611	Marked interest	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
10/67-71		Does he do any of these things either in summer or winter - music:	
10/67	612	Little opportunity	1 Yes 0 Not mentioned
10/68	613	Nil	1 Yes 0 Not mentioned
10/69	614	Occasionally	1 Yes 0 Not mentioned
10/70	615	Yes	1 Yes 0 Not mentioned
10/71	616	Marked interest	1 Yes 0 Not mentioned
10/72-76		Does he do any of these things either in summer or winter - dancing:	
10/72	617	Little opportunity	1 Yes 0 Not mentioned
10/73	618	Nil	1 Yes 0 Not mentioned
10/74	619	Occasionally	1 Yes 0 Not mentioned
10/75	620	Yes	1 Yes 0 Not mentioned
10/76	621	Marked interest	1 Yes 0 Not mentioned
10/78	622	Other special interests (especially creative, artistic)	- No information 0 Nil 1 Other 2 Other plus creative, artistic 9 Creative, artistic
10/79-80		Card Number	10 Card 10
11/5	623	Does father play with him much on working days	- No information 0 Nil 1 1 to 15 minutes 2 16 to 30 minutes 3 31 to 60 minutes 4 61 to 120 minutes 5 121 to 240 minutes 6 More

CARD/ COLUMN	VAR NO	TITLE	CODES
11/7	624	Does father play with him much on free days	- No information 0 Nil 1 1 to 15 minutes 2 16 to 30 minutes 3 31 to 60 minutes 4 61 to 120 minutes 5 121 to 240 minutes 6 More
11/9	625	Father's average number of free days per week	- No information 0 Nil 1 Less 2 ½ day 3 1 day 4 1½ day 5 2 days 6 3 days 7 4 days 8 5 or 6 days 9 7 days
11/10	626	Does child do any of these things with mother - "helping"	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/11	627	Does child do any of these things with mother - romping	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/12	628	Does child do any of these things with mother - constructional play	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/14	629	Does child do any of these things with mother - pretending games	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/16	630	Does child do any of these things with mother - out for pleasure	- No information 0 No 8 Very rarely/doubtful 9 Yes

CARD/ COLUMN	VAR NO	TITLE	CODES
11/18	631	Does child do any of these things with mother - ball games	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/19	632	Does child do any of these things with mother - stories	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/21	633	Does child do any of these things with mother - books	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/23	634	Does child do any of these things with mother - teaching 3 r's (excluding verbal repetition)	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/25	635	Does child do any of these things with father - "helping"	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/27	636	Does child do any of these things with father - romping	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/29	637	Does child do any of these things with father - constructional play	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/31	638	Does child do any of these things with father - pretending games	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/33	639	Does child do any of these things with father - out for pleasure	- No information 0 No 8 Very rarely/doubtful 9 Yes

CARD/ COLUMN	VAR NO	TITLE	CODES
11/35	640	Does child do any of these things with father - ball games	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/37	641	Does child do any of these things with father - stories	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/39	642	Does child do any of these things with father - books	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/41	643	Does child do any of these things with father - teaching 3 r's (excluding verbal repetition)	- No information 0 No 8 Very rarely/doubtful 9 Yes
11/42	644	Does child do any of these things with other - "helping"	8 Very rarely/doubtful 9 Yes
11/43	645	Does child do any of these things with other - romping	8 Very rarely/doubtful 9 Yes
11/44	646	Does child do any of these things with other - constructional play	8 Very rarely/doubtful 9 Yes
11/45	647	Does child do any of these things with other - pretending games	8 Very rarely/doubtful 9 Yes
11/46	648	Does child do any of these things with other - out for pleasure	8 Very rarely/doubtful 9 Yes
11/47	649	Does child do any of these things with other - ball games	8 Very rarely/doubtful 9 Yes
11/48	650	Does child do any of these things with other - stories	8 Very rarely/doubtful 9 Yes

CARD/ COLUMN	VAR NO	TITLE	CODES
11/49	651	Does child do any of these things with other - books	8 Very rarely/doubtful 9 Yes
11/50	652	Does child do any of these things with other - teaching 3 r's (excluding verbal repetition)	8 Very rarely/doubtful 9 Yes
11/51	653	Does child do any of these things with other - (who) - "helping"	- No information 0 Nil 4 Younger child 5 Older child 6 Man 7 Woman
11/52-57		Does child do any of these things with other - (who) - romping.	
11/52	654	Nil	1 Yes 0 Not mentioned
11/53	655	Younger child	1 Yes 0 Not mentioned
11/54	656	Older child	1 Yes 0 Not mentioned
11/55	657	Man	1 Yes 0 Not mentioned
11/56	658	Woman	1 Yes 0 Not mentioned
11/57	659	No information	1 Yes 0 Not mentioned
11/59-64		Does child do any of these things with other - (who) - constructional play	
11/59	660	Nil	1 Yes 0 Not mentioned
11/60	661	Younger child	1 Yes 0 Not mentioned
11/61	662	Older child	1 Yes 0 Not mentioned
11/62	663	Man	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
11/63	664	Woman	1 Yes 0 Not mentioned
11/64	665	No information	1 Yes 0 Not mentioned
11/65-70		Does child do any of these things with other - (who) - pretending games.	
11/65	666	No information	1 Yes 0 Not mentioned
11/66	667	Nil	1 Yes 0 Not mentioned
11/67	668	Younger child	1 Yes 0 Not mentioned
11/68	669	Older child	1 Yes 0 Not mentioned
11/69	670	Man	1 Yes 0 Not mentioned
11/70	671	Woman	1 Yes 0 Not mentioned
11/71	672	Does child do any of these things with other - (who) - out for pleasure	- No information 0 Nil 4 Younger child 5 Older child 6 Man 7 Woman
11/72-77		Does child do any of these things with other - (who) - ball games	
11/72	673	Nil	1 Yes 0 Not mentioned
11/73	674	Younger child	1 Yes 0 Not mentioned
11/74	675	Older child	1 Yes 0 Not mentioned
11/75	676	Man	1 Yes 0 Not mentioned
11/76	677	Woman	1 Yes 0 Not mentioned
11/77	678	No information	1 Yes 0 Not mentioned
11/79-80		Card Number	11 Card 11

CARD/ COLUMN	VAR NO	TITLE	CODES
12/4-9		Does child do any of these things with other - (who) - stories	
12/4	679	Nil	1 Yes 0 Not mentioned
12/5	680	Younger child	1 Yes 0 Not mentioned
12/6	681	Older child	1 Yes 0 Not mentioned
12/7	682	Man	1 Yes 0 Not mentioned
12/8	683	Woman	1 Yes 0 Not mentioned
12/9	684	No information	1 Yes 0 Not mentioned
12/11	685	Does child do any of these things with other - (who) - books	- No information 0 Nil 4 Younger child 4 Older child 6 Man 7 Woman
12/13-18		Does child do any of these things with other - (who) - teaching 3 r's (excluding verbal repetition)	
12/13	686	No information	1 Yes 0 Not mentioned
12/14	687	Nil	1 Yes 0 Not mentioned
12/15	688	Younger child	1 Yes 0 Not mentioned
12/16	689	Older child	1 Yes 0 Not mentioned
12/17	690	Man	1 Yes 0 Not mentioned
12/18	691	Woman	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
12/19	692	Is there anything else that you or your husband often do with him	- No information 0 Nil 8 Occasionally 9 Yes
12/21-29		Is he very sensitive (easily hurt) - circumstances	
12/21	693	No information	1 Yes 0 Not mentioned
12/22	694	Nil	1 Yes 0 Not mentioned
12/23	695	Other	1 Yes 0 Not mentioned
12/24	696	Feeling out of it	1 Yes 0 Not mentioned
12/25	697	Someone's luckier	1 Yes 0 Not mentioned
12/26	698	Teased/laughed at	1 Yes 0 Not mentioned
12/27	699	Criticised	1 Yes 0 Not mentioned
12/28	700	Others hurt	1 Yes 0 Not mentioned
12/29	701	Sad stories	1 Yes 0 Not mentioned
12/31	702	Is he very sensitive (easily hurt) - overall	- Little opportunity 0 Not at all 1 Not particularly 2 Doubtful/variable 3 Yes on the whole 4 Yes, very sensitive
12/33-42		Does he often get into a tantrum	
12/33	703	No information	1 Yes 0 Not mentioned
12/34	704	Never	1 Yes 0 Not mentioned
12/35	705	Very placid	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
12/36	706	Mild temper only	1 Yes 0 Not mentioned
12/37	707	Less than once or twice a week	1 Yes 0 Not mentioned
12/38	708	Once or twice a week	1 Yes 0 Not mentioned
12/39	709	Several times a week	1 Yes 0 Not mentioned
12/40	710	Once or twice a day	1 Yes 0 Not mentioned
12/41	711	Several times a day	1 Yes 0 Not mentioned
12/42	712	Many times a day	1 Yes 0 Not mentioned
12/43-63		How is tantrum shown	
12/43	713	No information	1 Yes 0 Not mentioned
12/44	714	None of these	1 Yes 0 Not mentioned
12/45	715	Screams	1 Yes 0 Not mentioned
12/46	716	Bites	1 Yes 0 Not mentioned
12/47	717	Rigid	1 Yes 0 Not mentioned
12/48	718	Thrashing limbs	1 Yes 0 Not mentioned
12/49	719	Shouts	1 Yes 0 Not mentioned
12/50	720	Blue in face	1 Yes 0 Not mentioned
12/51	721	Abuses mother or father	1 Yes 0 Not mentioned
12/52	722	Other	1 Yes 0 Not mentioned
12/53	723	No information	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
12/54	724	None of these	1 Yes 0 Not mentioned
12/55	725	Lies on floor	1 Yes 0 Not mentioned
12/56	726	Stamps	1 Yes 0 Not mentioned
12/57	727	Slams doors	1 Yes 0 Not mentioned
12/58	728	Hits inanimate objects	1 Yes 0 Not mentioned
12/59	729	Hits people	1 Yes 0 Not mentioned
12/60	730	Pinches	1 Yes 0 Not mentioned
12/61	731	Scratches	1 Yes 0 Not mentioned
12/62	732	Throws things	1 Yes 0 Not mentioned
12/63	733	Hurts self	1 Yes 0 Not mentioned
12/65-75		What is done about tantrum	
12/65	734	Never angry	1 Yes 0 Not mentioned
12/66	735	Other	1 Yes 0 Not mentioned
12/67	736	Give own way	1 Yes 0 Not mentioned
12/68	737	Comfort	1 Yes 0 Not mentioned
12/69	738	Divert attention	1 Yes 0 Not mentioned
12/70	739	Ignore	1 Yes 0 Not mentioned
12/71	740	Laugh	1 Yes 0 Not mentioned
12/72	741	Reproach	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
12/73	742	Other punishment	1 Yes 0 Not mentioned
12/74	743	Isolate	1 Yes 0 Not mentioned
12/75	744	Smack	1 Yes 0 Not mentioned
12/77	745	Does he show jealously	- No information 0 Never 1 Occasionally 2 Prevailing attention
12/79-80		Card Number	12 Card 12
13/4	746	Any "rivals" - children	- Other children 0 Special older sibling 1 Special older sibling + others 2 All older siblings 3 All older siblings + others 4 Special younger sibling 5 Special younger sibling + others 6 All younger siblings 7 All younger siblings + others 8 All siblings 9 All siblings + others
13/5	747	Any "rivals" - adults	- No adult rival 0 Other 4 Father 5 Mother 6 Father + other 7 Mother + other 8 Mother + father 9 Mother + father + other
13/7	748	Love object	- No jealousy 3 Other 4 Father 5 Mother 6 Father + other 7 Mother + other 8 Mother + father 9 Mother + father + other
13/9-19		How jealousy shown	
13/9	749	No jealousy	1 Yes 0 Not mentioned
13/10	750	Other	1 Yes 0 Not mentioned
13/11	751	Demandingness to love object	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
13/12	752	"Baby ways"	1 Yes 0 Not mentioned
13/13	753	Angry cry	1 Yes 0 Not mentioned
13/14	754	Hurt cry	1 Yes 0 Not mentioned
13/15	755	Hostility to other (things/people)	1 Yes 0 Not mentioned
13/16	756	Hostility to rival	1 Yes 0 Not mentioned
13/17	757	Hostility to love object	1 Yes 0 Not mentioned
13/18	758	Exaggerated affection to rival	1 Yes 0 Not mentioned
13/19	759	Withdrawal from love object	1 Yes 0 Not mentioned
13/21-31		Methods tried	
13/21	760	No jealousy	1 Yes 0 Not mentioned
13/22	761	Other	1 Yes 0 Not mentioned
13/23	762	Try to avoid situations	1 Yes 0 Not mentioned
13/24	763	Give affection	1 Yes 0 Not mentioned
13/25	764	Distract	1 Yes 0 Not mentioned
13/26	765	Rational appeal	1 Yes 0 Not mentioned
13/27	766	Sentimental appeal	1 Yes 0 Not mentioned
13/28	767	Laugh	1 Yes 0 Not mentioned
13/29	768	Ignore	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
13/30	769	Reproach	1 Yes 0 Not mentioned
13/31	770	Punish	1 Yes 0 Not mentioned
13/33	771	Is he ever spiteful	- No information 0 Never 1 Only when provoked 2 Spontaneously occasionally 3 Spontaneously Yes 4 Spontaneously very often
13/35-52		Spiteful to whom.	
13/35	772	No spite	1 Yes 0 Not mentioned
13/36	773	To others	1 Yes 0 Not mentioned
13/37	774	Other children	1 Yes 0 Not mentioned
13/38	775	Siblings	1 Yes 0 Not mentioned
13/39	776	Animals	1 Yes 0 Not mentioned
13/40	777	Mother	1 Yes 0 Not mentioned
13/41	778	Father	1 Yes 0 Not mentioned
13/42	779	Anyone	1 Yes 0 Not mentioned
13/43-53		What does he do to them	
13/43	780	No spite	1 Yes 0 Not mentioned
13/44	781	Other	1 Yes 0 Not mentioned
13/45	782	Verbal	1 Yes 0 Not mentioned
13/46	783	Takes other child's things	1 Yes 0 Not mentioned
13/47	784	Spiteful interference	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
13/48	785	Hits	1 Yes 0 Not mentioned
13/49	786	Pulls hair	1 Yes 0 Not mentioned
13/50	787	Pinches	1 Yes 0 Not mentioned
13/51	788	Scratches	1 Yes 0 Not mentioned
13/52	789	Kicks	1 Yes 0 Not mentioned
13/53	790	Bites	1 Yes 0 Not mentioned
13/54-61		Methods tried	
13/54	791	No spite	1 Yes 0 Not mentioned
13/55	792	Nil	1 Yes 0 Not mentioned
13/56	793	Other	1 Yes 0 Not mentioned
13/57	794	Reproach	1 Yes 0 Not mentioned
13/58	795	Deprivation	1 Yes 0 Not mentioned
13/59	796	Do same to child	1 Yes 0 Not mentioned
13/60	797	Smack	1 Yes 0 Not mentioned
13/61	798	Isolate	1 Yes 0 Not mentioned
13/63	799	Do you find him saying nasty things to you	- No information 0 No 1 Occasionally 2 Yes 3 Very often
13/65	800	Do you find him saying nasty things to father	- No information 0 No 1 Occasionally 2 Yes 3 Very often

CARD/ COLUMN	VAR NO	TITLE	CODES
13/67-73		Do you find him saying nast things - what done.	
13/67	801	Not applicable	1 Yes 0 Not mentioned
13/68	802	Nil	1 Yes 0 Not mentioned
13/69	803	Other	1 Yes 0 Not mentioned
13/70	804	Reproach	1 Yes 0 Not mentioned
13/71	805	Deprivation	1 Yes 0 Not mentioned
13/72	806	Smack	1 Yes 0 Not mentioned
13/73	807	Isolate	1 Yes 0 Not mentioned
13/75	808	Does he ever have charge of other children on street	- No information 0 Nil 2 Occasionally other children 3 Occasionally siblings 4 Yes, other children 5 Yes, siblings
13/76	809	Does he ever have charge of other children in house	1 Occasionally other children and siblings 6 Occasionally other children 7 Occasionally siblings 8 Yes, other children 9 Yes, siblings
13/79-80		Card Number	13 Card 13
14/4-11		Is he allowed out of doors on his own·	
14/4	810	No information	1 Yes 0 Not mentioned
14/5	811	No	1 Yes 0 Not mentioned
14/6	812	Private yard/garden	1 Yes 0 Not mentioned
14/7	813	Public balcony	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
14/8	814	Street, with older children	1 Yes 0 Not mentioned
14/9	815	Courtyard	1 Yes 0 Not mentioned
14/10	816	Own pavement	1 Yes 0 Not mentioned
14/11	817	Across road	1 Yes 0 Not mentioned
14/13	818	Ever gets lost	- No information 0 No 1 Always trivial once or twice 2 Been serious, once or twice 3 Always trivial occasionally 4 Been serious, occasionally 5 Always trivial, definite tendency 6 Been serious, definite tendency
14/15	819	Ever sent on errands	0 No 1 Other occasionally 2 Other yes 3 Other very often
14/16	820	Ever sent on errands to neighbours, etc.	4 Occasionally 5 Yes 6 Very often
14/17	821	Ever sent on errands to shops	7 Occasionally 8 Yes 9 Very often
14/19	822	Does he as a rule, without help, wash and dry own hands	- No information 0 Never 1 Rarely 2 Sometimes 3 Usually
14/20	823	Does he as a rule, without help, wash and dry own face	- No information 0 Never 1 Rarely 2 Sometimes 3 Usually

CARD/ COLUMN	VAR NO	TITLE	CODES
14/22	824	Does he as a rule, without help, wash self in bath	- No information 0 Never 1 Rarely 2 Sometimes 3 Usually
14/23	825	Does he usually undress himself at night	- No information 0 Nil 1 Other, rarely 2 Other, sometimes 3 Other, usually
14/24	826	Does he usually undress himself at night - all but difficult fatstenings	4 Rarely 5 Sometimes 6 Usually
14/25	827	Does he usually undress himself at night - everything	7 Rarely 8 Sometimes 9 Usually
14/27	828	How far does he dress himself in the mornings as a rule	- No information 0 Nil 1 Other, rarely 2 Other, sometimes 3 Other, usually
14/28	829	How far does he dress himself in the mornings as a rule - all but difficult fastenings	4 Rarely 5 Sometimes 6 Usually
14/29	830	How far does he dress himself in the mornings as a rule - everything	7 Rarely 8 Sometimes 9 Usually
14/31	831	Can he do more, or has he little opportunity	- Not applicable 1 Other 6 Can't do more but tries 7 Can do more little opportunity 8 "Lazy" 9 Little opportunity and "lazy"

CARD/ COLUMN	VAR NO	TITLE	CODES
14/33	832	Does he mind if people see him without clothes	- No information 0 No 4 Some of family 5 Some strangers 6 All strangers 7 Some strangers + some family 8 All strangers + some family 9 Anyone
14/35	833	Does he mind if people see him in the toilet	- No information 0 No 4 Some of family 5 Some strangers 6 All strangers 7 Some strangers + some family 8 All strangers + some family 9 Anyone
14/37	834	Does he ever see children of the opposite sex without clothes on	- No information 0 No 1 Doubtful 2 Yes, occasionally 3 Yes, regular practice
14/38	835	Does he ever see you without clothes on	- No information 0 No 1 Occasionally 2 Definite yes
14/39	836	Nakedness - mother's attitude	- No information 1 Definite policy 2 Unconcerned 3 Mildly concerned 4 Definitely concerned
14/40	837	Ever sees father without clothes on	- No information 0 No 1 Occasionally 2 Definite yes
14/42	838	Does he show guilt of his own accord before you show you are displeased with him, on taking things without permission	- "Problem" 0 No 1 Doubtful/variable 2 Yes 9 Never occurs

CARD/ COLUMN	VAR NO	TITLE	CODES
14/44	839	Does he show guilt of his own accord before you show you are displeased with him on telling an untruth	1 Problem 0 No problem
14/45	840	Does he show guilt of his own accord before you show you are displeased with him on telling an untruth	0 No 1 Doubtful/variable 2 Yes 9 Never occurs
14/46-50		Is untruthfulness a problem:	
14/46	841	No information	1 Yes 0 Not mentioned
14/47	842	No	1 Yes 0 Not mentioned
14/48	843	Doubtful/variable	1 Yes 0 Not mentioned
14/49	844	Yes	1 Yes 0 Not mentioned
14/50	845	Never occurs	1 Yes 0 Not mentioned
14/52	846	Is he ever disobedient with you	- No information 0 Never 1 Rarely 2 Sometimes 3 Usually
14/54	847	Can you trust him not to touch things if you've told him not to	- No information 0 Never 1 Rarely 2 Sometimes 3 Usually
14/56	848	What punishment do you use - smacking	- No information 0 Never 1 Less 2 Once or twice a week 3 Several times a week 4 Once or twice a day 5 Several times a day 6 Constantly

CARD/ COLUMN	VAR NO	TITLE	CODES
14/58-65		What punishment do you use	
14/58	849	No information	1 Yes 0 Not mentioned
14/59	850	Nil	1 Yes 0 Not mentioned
14/60	851	Other	1 Yes 0 Not mentioned
14/61	852	Withdrawal of affection	1 Yes 0 Not mentioned
14/62	853	Threats	1 Yes 0 Not mentioned
14/63	854	Threats to tell father	1 Yes 0 Not mentioned
14/64	855	Deprivations	1 Yes 0 Not mentioned
14/65	856	Isolates	1 Yes 0 Not mentioned
14/67-76		Which punishment upsets most	
14/67	857	No information	1 Yes 0 Not mentioned
14/68	858	Nil	1 Yes 0 Not mentioned
14/69	859	Variable	1 Yes 0 Not mentioned
14/70	860	Other	1 Yes 0 Not mentioned
14/71	861	Withdrawal of affection	1 Yes 0 Not mentioned
14/72	862	Threats	1 Yes 0 Not mentioned
14/73	863	Threats to tell father	1 Yes 0 Not mentioned
14/74	864	Deprivations	1 Yes 0 Not mentioned
14/75	865	Isolates	1 Yes 0 Not mentioned
14/76	866	Smacking	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
14/78	867	What punishment does father use (smacking)	- No information 0 Never 1 Less 2 Once or twice a week 3 Several times a week 4 Once or twice a day 5 Several times a day 6 Constantly
14/79-80		Card Number	14 Card 14
15/5-11		What punishment does father use	
15/5	868	No information	1 Yes 0 Not mentioned
15/6	869	Nil	1 Yes 0 Not mentioned
15/7	870	Other	1 Yes 0 Not mentioned
15/8	871	Withdrawal of affection	1 Yes 0 Not mentioned
15/9	872	Threats	1 Yes 0 Not mentioned
15/10	873	Deprivations	1 Yes 0 Not mentioned
15/11	874	Isolate	1 Yes 0 Not mentioned
15/13-18 20-22		Which punishment upsets most	
15/13	875	No information	1 Yes 0 Not mentioned
15/14	876	Nil	1 Yes 0 Not mentioned
15/15	877	Variable	1 Yes 0 Not mentioned
15/16	878	Other	1 Yes 0 Not mentioned
15/17	879	Withdrawal of affection	1 Yes 0 Not mentioned
15/18	880	Threats	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
15/20	881	Deprivations	1 Yes 0 Not mentioned
15/21	882	Isolate	1 Yes 0 Not mentioned
15/22	883	Smacking	1 Yes 0 Not mentioned
15/24-34		How does he take a smacking from you	
15/24	884	No information	1 Yes 0 Not mentioned
15/25	885	No smacking	1 Yes 0 Not mentioned
15/26	886	Other	1 Yes 0 Not mentioned
15/27	887	Making up	1 Yes 0 Not mentioned
15/28	888	Cheerful	1 Yes 0 Not mentioned
15/29	889	Indifferent	1 Yes 0 Not mentioned
15/30	890	Verbal protest	1 Yes 0 Not mentioned
15/31	891	Retaliation	1 Yes 0 Not mentioned
15/32	892	Resentful (silent)	1 Yes 0 Not mentioned
15/33	893	Unhappy	1 Yes 0 Not mentioned
15/34	894	Cries, whimpers	1 Yes 0 Not mentioned
15/36-46		How does he take a smacking from father	
15/36	895	No information	1 Yes 0 Not mentioned
15/37	896	No smacking	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
15/38	897	Other	1 Yes 0 Not mentioned
15/39	898	Making up	1 Yes 0 Not mentioned
15/40	899	Cheerful	1 Yes 0 Not mentioned
15/41	900	Indifferent	1 Yes 0 Not mentioned
15/42	901	Verbal protest	1 Yes 0 Not mentioned
15/43	902	Retaliation	1 Yes 0 Not mentioned
15/44	903	Resentful (silent)	1 Yes 0 Not mentioned
15/45	904	Unhappy	1 Yes 0 Not mentioned
15/46	905	Cries, whimpers	1 Yes 0 Not mentioned
15/48-58		Is there any difficulty with his talking	
15/48	906	No information	1 Yes 0 Not mentioned
15/49	907	Nil	1 Yes 0 Not mentioned
15/50	908	Other	1 Yes 0 Not mentioned
15/51	909	Talks too much	1 Yes 0 Not mentioned
15/52	910	Bad accent	1 Yes 0 Not mentioned
15/53	911	Swearing	1 Yes 0 Not mentioned
15/54	912	Lisping/lalling	1 Yes 0 Not mentioned
15/55	913	Babyish	1 Yes 0 Not mentioned

CARD/ COLUMN	VAR NO	TITLE	CODES
15/56	914	Stuttering	1 Yes 0 Not mentioned
15/57	915	Difficult to understand	1 Yes 0 Not mentioned
15/58	916	Backward	1 Yes 0 Not mentioned
15/60	917	Does he ever stutter or stammer	- No information 0 No 1 Occasionally 2 Often
15/62	918	Does he ever say anything about death	- No information 0 No 9 Yes
15/64	919	Does he ever say anything about God	- No information 0 No 9 Yes
15/66	920	Does he ever go to church	- No information 0 Never 1 Less 2 Monthly + 3 Weekly +
15/68	921	Does he ever go to Sunday School	- No information 0 Never 1 Less 2 Monthly + 3 Weekly +
15/70	922	Denomination	- Never goes to church 1 Roman Catholic 2 Church of England 3 Nonconformist 4 Jewish 5 Other 6 Roman Catholic + Church of England occasionally
15/71	923	Are there any other points about him that you'd like to mention	- No information 0 No 9 Yes
15/79-80		Card Number	15 Card 15

Social Science Research Council

FINAL REPORT on grant HR

please type throughout

Please indicate whether there has been any change in investigator, research staff or institution since the grant was awarded

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01-636-1500

5 title of project

GENERAL ANALYSIS OF LONGITUDINAL RESEARCH DATA ON PSYCHOLOGICAL DEVELOPMENT FROM 0-17 YEARS.

6 aims and methods of research (up to 300 words)

The aims stated in the application were:-

"The proposal is to carry out a comprehensive analysis of longitudinal data on psychological development, obtained at this Centre, on a reasonably representative sample of children, from the ages of 0-17 years. The data consist of detailed life histories, psychological test data, school data, and parallel data on physical development obtained by Prof. J.M. Tanner's department at the Institute of Child Health. It is planned firstly to conduct cross-sectional analyses on a wide range of variables at each of the 23 ages when the children were seen, and to obtain more general measures by factor analysis. This will be followed by longitudinal analyses of individual developmental trends from age to age. These will cover the development of abilities, personality, and their relationship to physical development. Throughout, account will be taken of sex, family background variables, and of interrelationships between developmental variables. Case-histories of children showing unexpected changes - favourable or unfavourable - will be examined for possibly causal factors."

7 period covered by report

1/8/70 to 31/7/75

8 total grant awarded over period

£24,000 (£31,357 with cost of living increase)

9 research staff (name, status and period of appointment)

SSRC Funds.

Miss J.A. Munro, B.A., B.Ed., M.Phil., Research Officer Aug.1970 - Dec.1972
B. Medjuck, B.Sc., M.Phil., Research Officer March1973 - Jul.1975
C.F. Owen, B.Sc., Assistant Research Officer June 1973 - Jul.1975
Mrs. S. Clautour, Secretary/Executive Officer Aug.1970 - Dec.1972
Temporary secretaries Jan.1973 - Jul.1975

On Institute of Education Funds.

C.B. Hindley, Director of project and Senior Lecturer, then Professor Aug.1970 - Jul.1975

Part-Time and Temporary Research Assistants:

C. Cooper, part-time, 18 months; A. Hendricks, part-time, 6 months; C. Batarda-Fernandez, part-time, 6 months; R. Freeman, part-time, 9 months, full-time, 12 months; S. Sharpe, part-time, 12 months; A. Sutherland, full-time, 12 months; P. Howie, full-time, 3 months.

Honorary Research Associate:

Professor T.W. Moore of Aarhus University, Denmark.

10 publications

Please list all publications which have arisen from the project or are in preparation, with details of author, editor, publisher and date of publication. If there are no such publications, please enter NIL. (If you need extra space please continue on paper the same size as this.)

C.B. Hindley (1971) Testing of Infant Development and Prediction of 11-year IQ in Normal Children. Proc. Royal Soc. Med., 64, 475

C.B. Hindley (1972) The Place of Longitudinal Methods in the Study of Development. pp. 23-50 in F.J. Mönks, W.W. Hartup, J. de Wit (Eds.) Determinants of Behavioral Development. Academic Press, New York & London.

T.W. Moore (1972) The Later Outcome of Early Care by the Mother and Substitute Daily Regimes. in: Determinants of Behavioral Development, (op. cit.).

Compte Rendu de la XIe Réunion des Equipes chargées des Etudes sur la Croissance et le Développement de l'Enfant Normal, Centre International de l'Enfance, Paris, 1972.

J.A. Munro & C.B. Hindley (1972) Some Preliminary Findings on Consistency of I.Q.'s up to 17 Years (pp. 207-209).

T.W. Moore (1972) Patterns of Early Care and Their Outcome to Adolescence (pp. 216-227).

Compte Rendu de la XIIe Réunion des Equipes chargées des Etudes sur la Croissance et le Développement de l'Enfant Normal, Centre International de l'Enfance, Paris, 1974.

C.B.Hindley & C.F. Owen (1974) Individual, Sex, and Social Class Differences in the Development of Ability from 6 Months to 17 Years (pp. 31-36).

C.F. Owen (1974) The Prediction of I.Q. at Adolescence from Early I.Q. and Social Class Indices (pp. 239-42).

T.W. Moore & S.E. Clautour (1974) Attitudes of Young Adolescents to Marriage, Parenthood, and Growing Up (pp. 263-70).

R.B. Medjuck & C.B. Hindley (1974) — The Stability and Structure of Personality During Adolescence (pp. 275-282).

T.W. Moore (1975) — Exclusive early mothering and its alternatives - the outcome to adolescence. Scand. J. Psychol., 16, 255-272.

Compte Rendu de la XIIIe Réunion des Equipes chargées des Etudes sur la Croissance et le Développement de l'Enfant Normal. Centre International de l'Enfance. Paris. 1976.

C.B. Hindley (1976) — Individual Differences in Curves of Development of D.Q. and I.Q. from 6 Months to 17 Years (pp. 203-4).

C.F. Owen (1976) — Individual Differences in I.Q. Profile Between Six Months and Seventeen Years (pp. 205-214).

C.F. Owen (1976) — Sex and Social Class Longitudinal I.Q. Trends in Three European Samples (pp. 199-202).

T.W. Moore (1976) — How Many Shades Make a Colour? Problems of Quantifying Qualitative Data, Exemplified by a Study of Children's Attitudes to Life (pp. 215-228).

T.W. Moore & S.E. Clautour (1977) — Attitudes of life in children and young adolescents. Scand. J. Psychol., 18, 10-20.

C.B. Hindley & C.F. Owen (1978) — The Extent of Individual Changes in I.Q. For Ages Between Six Months And Seventeen Years, in a British Longitudinal Sample. J. Child Psychol. Psychiat. (in Press).

C.B. Hindley & C.F. Owen (1979) — An Analysis of Individual Patterns of D.Q. and I.Q. Curves from 6 Months to 17 Years. Brit. J. Psychol. (In Press).

In Preparation.

C.F. Owen & C.B. Hindley — Sex and Social Class Differences in Trends of D.Q. and I.Q. From 6 Months to 17 Years.

C.F. Owen, C.B. Hindley et al. — An International Comparison of Sex and Social Class Differences in Trends of D.Q. and I.Q. from 6 Months to 17 Years.

C.B. Hindley & R.B. Medjuck — Internal Consistency and Factorial Composition of Cattell's H.S.P.Q. Scale with a British Sample at 15 Years.

R.B. Medjuck & C.B. Hindley — Internal Consistency and Factorial Composition of Cattell's 16 P.F. Scale with a British Sample at 16 Years.

C.B. Hindley & R.B. Medjuck — Consistency of Personality on Cattell's Factors and on EI and N From Fifteen to Eighteen Years.

P. Howie, C.B. Hindley & C.F. Owen — The Consistency of Fluency, Flexibility and Originality Within and Between 15 and 17 Years.

Publications From Associated Work (On Leverhulme Grant).
This work has been facilitated by SSRC support for the project as a whole.

B.M. Giuganino & C.B. Hindley	A Longitudinal Study of Continuity of Personality Structure, and Stability of Personality Measures, in Children From 3 To 11 Years (pp. 193-198) in Compte Rendu, 1976 (See Above).

In Preparation.

B.M. Giuganino & C.B. Hindley	Continuity of Personality Dimensions From Three to Fifteen Years.
B.M. Giuganino & C.B. Hindley	Stability of Personality Characteristics in Subjects of a Longitudinal Sample From Three to Fifteen Years.

Before completing this section, please consider carefully the notes on page 1. Additional pages should be on paper the same size as this, within margins the same size as those on this form, heading each page 'Final Report (cont'd)', numbering the pages in sequence and clipping them to the back of this form. If you wish to submit any other additional material not already sent in to the Council, two copies should be sent in with this report.

CONTENTS OF REPORT.

C (Owen, 1976) Individual Differences in IQ Profile between Six Months and Seventeen Years.

D (Howie, Hindley & Owen) The Consistency of Fluency, Flexibility and Originality within and between 15 and 17 Years in a Longitudinal Sample.

E (Hindley & Medjuck) The Internal Consistency and Factor Structure of Cattell's HSPQ Scales applied to British 15-Year-Olds.

F (Medjuck & Hindley) 16 PF Data at 18 Years.

Moore, T.W. (1975) Exclusive early mothering and its alternatives: The Outcome to Adolescence.

Moore, T.W. & Clautour, S.E. (1977) Attitudes of life in children and young adolescents.

BACKGROUND TO THE PROJECT.

I. INTRODUCTION.

The SSRC was requested in 1970 to support a programme of analysis of longitudinal data that had been collected on a London sample of subjects from birth to 17 years. Unusually for university-based research, the project had been directly financed by the University of London Institute of Education, in parallel with a study of the same subjects' physical development, supported by the Institute of Child Health. There had been severe cuts in government expenditure at that time, which forced the Institute of Education to make sharp reductions in its expenditure, amongst which was the reluctant decision to terminate the Longitudinal Research Project. Had outside support not materialized at that point, it would have meant that the possibility of obtaining overall results from a rich body of data would have been lost. The substantial investment of money, time, and effort in the project would, in consequence, have been largely wasted, apart from a series of interim publications on particular aspects of the data over limited periods of time, which had been accomplished during data collection.

The SSRC's preparedness to grant financial support played a vital role in making it possible to derive research benefits from the data.

II. BEGINNINGS OF THE LONGITUDINAL RESEARCH.

The classic Harvard Growth Study of Dearborn and Rothney (1941) most strikingly demonstrated the need for longitudinal studies. Prior to that it had been taken for granted by most workers in the field that average curves of physical growth, and of mental age scores, adequately portrayed the course of at least what was measurable in these aspects of development. It was equally assumed that the I.Q. was constant, give or take a few points, despite the absence of more than correlational evidence - a belief that was rendered all the more plausible by the doctrine that intelligence was essentially a matter of heredity. The Harvard workers showed how mean curves in fact conceal important features of physical development, and, more to the point for the psychologist, that curves of individuals' I.Q.'s can be far from constant.

The notion of collecting comprehensive life-history and psychological assessment data from a group of normal children, from birth to maturity, originated in the U.S.A. from workers often with a clinical background, and is exemplified in the well-known Berkeley studies of Nancy Bayley, and of MacFarlane and Honzik, and in that at Fels, with which Sontag, Baldwin, Kagan, and McCall have been associated. The general aims were not only to look at constancies in development, but to be able to relate changes in one area of development to those taking place in another, and to what was going on in the child's environment, particularly the family.

In Europe there had been the penetrating individual subject longitudinal studies of Piaget on the cognitive development of his own children, over important phases of the process. Prior to the Second World War, there had been no systematic long-term longitudinal studies based on samples large enough to make it possible to investigate individual differences, and interrelationships in development. The recognition of a need for such studies arose around the same time by Douglas, who was able to convert his perinatal study on a national sample into a longitudinal programme, and by Moncrieff and Miss Gardner, who were responsible for establishing our project. This differed from that of Douglas in being concerned with a much more detailed psychological investigation of the development of a necessarily smaller sample of subjects. Soon after our project was under way, several others were being started in Brussels, Paris, Stockholm and Zurich, and the Centre

International de l'Enfance sponsored a meeting of the people concerned - which became the first of many. Those responsible for the projects decided to model their methods on those we had been using in London. The resulting cooperation of paediatricians and psychologists from several countries has been mutually educative and stimulating, and has led to some useful opportunities for comparing results.

III. AIMS OF THE LONGITUDINAL RESEARCH: NATURE OF THE DATA.

Looking back to 1949, when the project began, one wonders at the confidence of a committee in appointing two young investigators, with no experience in serious developmental research, to assume major responsibility for its conduct, and entrusting them with carrying out a comprehensive longitudinal study from birth to maturity. However, the committee was faced with a general lack of experience in Britain of this kind of research, and there was no alternative to the researchers having to learn on the job.

Following in a general way the pattern established at Berkeley and Fels, it was decided to obtain the kind of information concerning normal children that would be obtained in a child guidance clinic, but in a more systematic way, and supplemented by a programme of psychological testing. Reflecting the interests of that time, it was planned to obtain information relevant to the testing: of psychoanalytic hypotheses on relationships between life in infancy and later development; of behaviour theory hypotheses about the influence of child-rearing practices; and, more generally, about consistencies in development.

Accordingly, during four 3-month periods, all expectant mothers on the lists of local maternity clinics in the W.C.1 area were approached, and interviews arranged with them and their husbands (see Moore et al., 1954). 222 subjects were originally recruited, but some failed to cooperate, so that by 18 months the sample numbered 180. Mother and child were seen at 10 days, 6 weeks; 3, 6, 9, 12 and 18 months, and annually thereafter. The data at each age consists of the following:-

protocols of interviews with mothers concerning changes in the family, many aspects of the child's typical behaviour, the mother's feelings about her child, and the parents' methods of upbringing. Much of the information is in coded form, but this does not apply to many of the qualitative remarks;

information on the child's history of schooling: including attendance at nursery school, primary school, type of secondary school attended, progress and adjustment at school;

tests of ability: in infancy, the Griffiths Scale of Infant Development (up to 18 months); the Stanford-Binet (3-11 years); A.H.4 (14 and 17 years); tests of vocabulary and reading ability in the primary years;

personality tests: protocols of a variety of personality tests based on play methods and standard play situations employed in the pre-school, and primary school years; in the adolescent years: personality inventories, questionnaires on interests, worries, social and personal attitudes and values etc.; and the Thematic Apperception Test;

protocols on interview with subjects, from 12 years onwards, concerning school, interests, outside activities, his own life, and aspirations for the future;

ratings on subjects' behaviour, which were made by the investigator following each testing and interview session with the subject.

I. INTRODUCTION.

The longitudinal approach is appropriate to the study of several kinds of developmental issues, including: typical sequences of behaviour; the course of development of individuals on some parameter/s, and differences between them; the stability over time of a subject's status on some parameter relative to that of a group; relationships over time among parameters; the influence of earlier events on later development; and more generally the relationship between background factors and aspects of development. It is also useful when it is important to have accurate information concerning the age at which particular events occur. A great advantage, for many purposes, is that the continuing contact with the same individuals permits the accumulation of greater knowledge of a subject and his family, than would be possible with one-off contacts.

However, as Tanner pointed out as long ago as 1951, with particular reference to anthropometric data, longitudinal data have commonly been analysed by methods appropriate to cross-sectional samples, as, for example, in presenting means and S.D.'s of sub-groups at successive ages. Where there has been concern with relationships over time it has usually been in terms of correlations across arbitrary pairs of points in time, or sometimes in terms of differences in scores. Both of these methods conceal the course of development in the individual subjects. Only occasionally have workers been concerned with the course of development in individuals, and then in a rather non-systematic way.

Our sample was too small, and - though of varied social backgrounds - not sufficiently representative of a wide population, for it to serve primarily for the production of norms. We appreciated that the value of our data lay particularly in their wide and detailed coverage, and above all in their longitudinal character. It was, therefore, recognized that the most useful contributions we could make would be, when possible, to carry out analyses in ways which revealed the course of development in individuals, and in which individual differences in trend were not lost. A previous study of Hindley (1962) of individual D.Q. and I.Q. trends up to the age of 5 years, using an approach suggested by Dr. F. Yates, the eminent statistician, provided a means for doing this, particularly applicable to the I.Q. data, on which we had been asked by the SSRC to concentrate.

It is relevant to note that in 1970, when this project began, the important literature on methodology and conceptualization of longitudinal studies which has appeared in the '70's had hardly begun to emerge (e.g. volumes of Goulet and Baltes, 1970, Nesselroade and Reese, 1973, Wohlwill, 1973). This has undoubtedly clarified our thinking about the issues, but, fortunately, as well as recognizing the importance of treating individual trends, we had given considerable attention to the other important consideration which has achieved increasing recognition, that is the continuity or discontinuity of patterning of variables at different ages. So far as ability data are concerned, we had already explored the factor structures of the Griffiths Scale, used in infancy, and composition of the Stanford-Binet is well-known. In the case of personality variables, it will be seen below that continuity of personality structure received considerable attention.

One possible approach to our extensive data would have consisted in feeding as much of it as possible through a computer, deriving descriptive statistics for each age, and running a host of correlations. This was rejected for a variety of reasons which include: the difficulty of making sense of vast amounts of superficially processed results: virtual impossibility of knowing the statistical significance to be attached to findings, when chance associations would be given free reign to occur; but above all because of the interest in examining trends, and meaningful relationships between aspects of the data.

Some might reproach us for seeking to display developmental phenomena, particularly individual and group changes and differences, on measurable parameters, rather than working within the framework of any particular theory. In the writer's view there is room for many different ways of studying development, and he would argue that there is a place for work which has as an important aim that of seeking to discover some of the phenomena of development. To suggest this, is in no way to detract from the essential place of theory in science, but to insist that in a relatively immature science - that of the nature and form of changes occurring in individuals over time - it is as well to have relevant factual evidence. In fact, research of the present kind can serve on the one hand to render certain theories untenable, and, on the other, to raise questions which require further investigation and the finding of convincing explanations.

II. PLAN OF ANALYSIS.

In general terms the task was as follows:-

1. to codify and punch as much of the data as possible, to make them readily available for further use;

2. to derive descriptive statistics at each age on the variables being studied;

3. to examine the patterning of variables at particular ages;

4. to ascertain interrelationships between measures at different ages, in the first instance by correlational methods;

5. to bring to light individual trends over time, group trends, and their relationship to independent variables.

Following the recommendation of the SSRC that we concentrate first on the I.Q. data, with these we were able to carry out all the above steps (see Findings). In the case of creativity and personality data, to have attempted to obtain comparable measures across the span from infancy to 18 years did not appear feasible, although some of this has since proved possible by Gieganinc with support from the Leverhulme Trust. It was therefore decided to investigate the patterning of these variables at ages which for this project were at least temporarily, in effect, 'terminal', i.e. at 15, 17 and 18 years, and to determine the extent to which stability of scores was displayed over this period. The measures could then be used as outcome variables that could be related to precursor and independent variables.

III. STATISTICAL METHODS.

1. Types of Statistics.

Derivation of means, S.D.'s, correlations etc., presented no particular problems, however, it was also necessary to employ much more complex methods.

a) Treatment of Curves.
This involved polynomial curve-fitting to each individual's data points; analysis of variance of polynomial curves, taking account of group trends, differences in trend between subjects, and residual variance; and multivariate analysis of variance, as a way of comparing complex curves of groups, with several terms of the polynomial serving as a set of dependent variables.

b) Analysis of Variance Techniques with Unequal Numbers.
Given the nature of the sample, unequal numbers in cells are an inevitable feature. Several methods exist for performing such analyses, but none are straightforward, and it often proved advisable to perform

analyses in several ways as a cross-check. Thus, main effects could be extracted in a different order, and be extracted before - or after - interaction variance had been extracted.

c) Principal Component and Factor Analysis.
Principal Components, Principal factor, Varimax, and oblique rotation methods were employed, and factor scores derived. Cluster analysis was also employed.

2. Problems in Statistical Analyses.

The need for employing the aforementioned methods was evident at the start of the project, but neither Miss Munro nor the writer were expert statisticians, and the methods required under (a) (above) are not generally familiar to psychologists. Although they may give some attention to trends in grouped data, texts of statistics for use in psychological research give no attention to the treatment of individual curves. Nor are there pre-existing programmes for the kinds of analyses required.

At that time, although there were computing facilities at our Institute, a Department of Statistics had not then been established, and we had to seek outside statistical advice on a consultation basis. Unfortunately, it proved difficult to find statisticians who on the one hand were familiar with longitudinal problems, and on the other had the time to devote to them. A considerable amount of time was wasted in trying to work out suitable ways of applying the methods. Fortunately, in the end we received very valuable help from Mr. A. Westlake of the London School of Hygiene, but his available time was very limited. At a later stage Mr. Owen, who joined the team after Miss Munro resigned, was able, after a year or so, to master the necessary techniques himself, and to write any necessary programmes.

These problems would be much more manageable now, as we have Professor Goldstein as head of the Statistics Department at our Institute, who has a range of experience, unrivalled in Britain, of methods of longitudinal data analysis. Equally, the writer has perforce acquired a working knowledge concerning many of these methods.

IV. PERSONNEL.

During the first 2½ years, when Miss Munro was the research officer, a great deal was achieved with the aid of research assistants, in organizing the data, and getting much of it punched. At the same time the I.Q. data were subjected to descriptive and correlational statistical analysis. On the departure of Miss Munro, who had been with the project for several years previously, it was only possible to find two relatively inexperienced, though able, young men to replace her, B. Medjuck and C. Owen. This meant that each had to spend a very considerable amount of time in familiarizing himself with this area of work, with the data, and above all with complex statistical and computing methods. It speaks much for both of them that they were able to do this, and they played a very important part in producing very worthwhile results (see Findings).

Professor T. Moore, now of Aarhus University, but formerly with the Longitudinal Project for many years, has continued to work on data, and his publications and findings are referred to in this report. Mrs. Clautour, Executive Officer and secretary, has also played a valuable role in taking responsibility for putting the social and family background data on the sample in good order, and in helping with data analysis. Several research assistants have given valuable help.

Dr. E.M. Giuganino, on a parallel project supported by Leverhulme Trust, has worked in close association with the research team, which has proved mutually beneficial.

When SSRC support terminated in July 1975, Mr. Owen was able to continue working on the data for a further 18 months, supported by the Institute, and he is still engaged in writing up data with the author. Dr. B.M. Giuganino is now working on a half-time basis for a few months, supported by the Institute, to put the data in as good order as possible.

V. ACHIEVEMENTS OF THE PROJECT.

1. Research Findings.

The main research findings are outlined below (see Findings) and in accompanying reprints and drafts. Work on the data has not ceased, and the author is continuing to prepare material for publications, with some voluntary help from Mr. Owen.

2. Organization of Material.

a) General.
From the age of 4 years onwards, our records of both interviews and tests were designed for computer coding of responses, and for direct punching from the blanks on to cards. We were beset by two kinds of difficulties. One arose from developments in computer technology. We had employed coding systems in which 12 holes in a column were used, often with multiple punching. These were quite satisfactory for the old Hollerith tabulator, but they became unusable with modern computers. A great deal of work went into re-coding many of our forms, and developing a programme for assisting in this, as a result of which we were able to get a considerable amount of the material punched. A second difficulty arose when, as a result of government cuts in financial support for universities, and a consequent limitation in staffing, the University of London Computer Centre had to withdraw the facility of punching directly from our interview and testing forms. Henceforth, they could only accept material which was coded on their standard forms. Lacking surplus clerical help, this considerably limited the amount of data we were able to get punched.

b) Social and Family Background Data.
These have been re-codified at all ages from birth to 14 years on to standard forms. Data at birth and 14 years have been punched and tabulated.

c) Data obtained from Mothers.

(i) Mother's Inventory on Child's Behaviour.
Punched at 6, 7, 9, 11, 13, 15, 16 years.

(ii) Maternal Characteristics up to 4 Years.
Punched.

(iii) Interviews with Mothers (mostly about child).
Punched at 4, 5, 6, 7, 8 years, and partly from 12 to 17 years.

(iv) Child's Activities.
At 10 years - all punched.

(v) Mothers' Child Rearing Attitudes.
PARI (used when child 8 years) punched.
Oppenheim Questionnaire (used when child 12 years) punched.

(vi) Mothers' Maudsley Personality Inventory (Abbreviated).
Punched at 10 and 15 years.

d) Data Obtained From Child.

(i) D.Q. and I.Q. scores at 6m., 18m., 3, 5, 8, 11, 14 and 17 years, all punched.

(ii) Psychologist's ratings at 3, 5, 6, 7, 8, 9, 11, 12, 15, 16, 17 years, all punched.

(iii) Psychologist's Test Forms at 3, 5, 6, 7, 8, 9, 11, 12, 15, 16, 17 years, all punched. These include:-

Zazzo Bestiaire at 5 and 7 years.
Lerner Blocking Test at 5 and 7 years.
Rosenzweig P.F. Test at 8 years.
Junior MPI and MPI at 10 and 17 years.
Preference for School Subjects at 14 years.
Favourite Activities at 14, 15 years.
Interests at 15, 16, 17, 18 years.
Semantic Differential at 15 years.
Worries Questionnaire at 15 years.
"Uses" and "Consequences" (Creativity) tests at 15 years.
H.S.P.Q. (Cattell) at 15 years.
Personal Values at 16 years.
"Uses", "Meanings" (Creativity) at 17 years.
Radicalism v. Conservatism (Eysenck) at 17 years.
16 P.F. (Cattell) at 17 years.

e) Unpunched Data.
A considerable amount remains, at a number of ages, which it would be useful to be able to get re-codified and punched.

VI. DEPOSITING OF DATA WITH SSRC DATA BANK.

A small amount of material has already been deposited. In the next few months Dr. Giuganino will be responsible for arranging for data which were analysed on the project to be deposited. These will consist of the following:-

D.Q. and I.Q. scores at all available ages;

H.S.P.Q. and 16 P.F. scores at 15 and 18 years respectively;

Social and Family Background Data from birth to 14 years;

Junior MPI and MPI scores at 10 and 17 years, respectively;

Mother's Inventory on Child's Behaviour at 6, 7, 9, 11, 13, 15 and 16 years;

Mother's Child rearing attitudes - PARI at 8 years, Oppenheim questionnaire at 12 years.

Much of the other data would be very difficult for other workers to use, as the codings are not of such a straightforward type. However, we would be happy to consider positively any suggestions coming from the Data Bank. In addition, the personality ratings of Dr. Giuganino at 3, 7, 11 and 15 years from the Leverhulme project, will be deposited.

FINDINGS.

I. D.Q. AND I.Q. TRENDS FROM SIX MONTHS TO SEVENTEEN YEARS.

A. DATA, SAMPLES, AND STANDARDIZATION OF SCORES.

1. The Data. (see Hindley and Owen, 1978)

These consisted of scores on the following tests:

Griffiths Scale of Infant Development at 6 months and 18 months; (the test provides sub-scores on locomotor, manipulative, communicative, and social behaviour);

Stanford Binet Form L at 3 and 5 years;

Stanford Binet Form L (starred items) at 8 years;

Stanford Binet Form L-M (starred items) at 11 years;

A.H.4 at 14 and 17 years; (this provides verbal, non-verbal, and total scores).

2. Composition of the Tests.

Our earlier work had shown that at 6 months the first, or general factor, loaded predominantly on manipulative items, whilst at 18 months it loaded predominantly on verbal items (Munro, 1968). It is well known that the Stanford Binet yields a substantial general or 'g' factor, with a predominance of verbal items. The A.H.4 offers explicit measures of verbal and non-verbal intelligence.

3. Selection of Sample for Analysis. (see Hindley and Owen, 1978).

For most of the analyses it was necessary to employ subjects who had valid scores on each occasion. Hence invalid testings were omitted. Linear interpolation was carried out for a maximum of one missing or invalid value.

The resulting sample consisted of N = 109 (59 boys, 50 girls) from 6 months to 14 years, and N = 84 (47 boys, 37 girls) from 6 months to 17 years. The social class composition showed a wide range, but with some under-representation of Registrar General's Class 5 and over-representation of Class 3.

4. Mean Scores and S.D.'s of Samples. (see Hindley and Owen, 1978, Table 3)

Means. There is a tendency for all means, both of the longitudinal samples and the rest, to be higher than those of the standardization samples for the Griffiths and Stanford Binet. In the case of the Griffiths Scale this may simply be a reflection of inadequate standardization on small numbers; and, in the case of the Stanford Binet, a reflection of national differences. Both longitudinal samples show a tendency, significant at some ages, towards higher scores than the rest, and towards an upward trend of mean scores. Practice effects would hardly be an adequate explanation for the latter difference, as the rest had experienced a similar number of testings up to the comparison ages. It suggests that the constant sample contains a disproportionate number of subjects with rising individual trends (see below), as compared with leavers, irregular attenders, and those who did not co-operate so well.

Such reductions in heterogeneity of the sample are likely to lead to lower correlations than in the general population, and to some restriction in the variety of individual curves.

The S.D.'s on the best standardized test, the Stanford Binet, all tend to be above the standardization values in both the longitudinal samples and the rest, which is rather surprising if heterogeneity is restricted. This could be a vicissitude of the original sampling, and, in any case, it is well known that estimates of S.D.'s from smallish samples are less reliable than those of means.

5. Derivation of Standard Scores. (see Hindley and Owen, 1978)

In view of doubts about the standardization of the Griffiths Scale, of the fact that the standardization of the Stanford Binet was on U.S. children - and in any case displays some fluctuations in means and S.D.'s from age to age, and of the limited standardization of the A.H.4, S.D. scores were derived at each age from the appropriate longitudinal sample (with M = 0, S.D. = 1). This means that all results are expressed in relation to the sample mean at each age.

B. RESULTS.

1. Relationship Between Scores at Pairs of Ages (Correlations and Change Scores). (see Hindley and Owen, 1978)

a) Correlations.

The conventional method of correlations between scores across all pairs of ages, which has been used by many investigators, yielded results very similar to previous ones (see reviews of Bloom, 1964; Anastasi, 1968). It is of considerable interest that results from a London sample, born around 1950, should yield such a similarity to those from several U.S. samples born around 1930 onwards. This seriously calls in question the force of Schaie's (1972) critique of the validity of results arising from a particular longitudinal study, at least so far as I.Q.'s are concerned. The general finding is of relatively low correlations when scores from early childhood are involved, attaining values of 0.7 upwards across adjacent ages from 3 years, and of 0.7 upwards with terminal scores from 8 years.

b) Change Scores (see Hindley and Owen, 1978).

Tables of change scores across all pairs of ages have been provided. While it is recognized that these are particularly subject to unreliability, they have two virtues. One is their relevance to users of tests, who are often confronted with questions concerning likely amounts of subsequent change from an obtained score, or with the meaning to attach to observed changes in score. Secondly, distributions of obtained or expected change scores provide a valuable corrective to conclusions often drawn about the degree of stability of scores denoted by quite high correlations (eg. r = .8).

Changes in score are typically large from testings at early ages, consistently with the low r's, but median changes from age 3 years onwards fall to around .50 S.D. units (10 points of Stanford Binet I.Q.). However, 25% of the sample, as indicated by Q3 in Table 5 (Hindley and Owen, 1978), change by much larger amounts: 20 points or more from 3 to 11 years, 16 points or more from 5 to 11 years, 11 points from 8 to 11 years (when r = .89); 22 points + from 5 to 17 years, 17 points

from 8 to 17 years, 18 points from 11 to 17 years, and 11 points from 14 to 17 years. In individual subjects quite startling amounts of change are brought to light not only from infancy scores, for example; gains from 3 to 8 years of 67 points, 5 to 8 years of 47 points, or losses from 3 to 11 years of 47 points and from 8 to 14 years of 50 points.

Table 6 is perhaps the one of most value to the educational or clinical psychologist, in that it indicates the most likely change (median change) on a second occasion, taking account of regression towards the mean, and the quartiles of the distributions of expected change. This will make it easier for practitioners to judge whether an obtained change is of an order greater than that to be expected in the absence of any remedial measures, or harmful circumstances.

2. Patterns of Change in Score Across All Ages (see Hindley and Owen, 1979).

a) Results of Curve-Fitting.

Polynomials were fitted to each individual's array of standard scores. The logic of this procedure is not only to derive a descriptive characterization of an individual's succession of scores, but to be able to make a statistical test of the significance of any departure from the horizontal of his trend of scores.

Over all periods considered (Table 3, Hindley and Owen, 1979) the number of subjects with significant fits far surpassed the 5% chance expectation (at $p < .05$). Thus, on the larger sample ($N = 109$) 54% of subjects had significant fits for the 6 month to 14 year period, 26% from 3 years to 14 years, and 16% over the shorter 3 years to 11 years period. It follows that any general hypothesis of constancy of the I.Q. over longish periods in childhood is untenable. Summing across all individuals, the fitted curves account for a highly significant ($p < .001$) proportion of the total variance (Table 2). Further, the fact that different individuals required different terms of the polynomials to achieve a significant fit, denotes that there are individual differences not only in linear trends, but in the shapes of their I.Q. curves. It is also to be noted that subjects without a significant fit include approximately half with a fairly steady horizontal trend, and half with fluctuating, irregular trends.

b) By Eye Classification of Curves. (see Hindley and Owen, 1979).

Having established beyond all reasonable doubt that there are substantial individual differences in trends of I.Q. curves, the attempt was made to see whether the shapes of curves could be satisfactorily classified by eye.

After some preliminary trials, criteria were worked out which permitted curves to be classified under one of seven rubrics: up, up with hump, hump, horizontal, U shaped, down with U, down (Table 7, ibid).

Multivariate analysis of variance between the seven groups of curves confirmed that they differed highly significantly in trends ($p < .0001$), and it was estimated that the classification accounted for 61% of regression variance from 6 months to 17 years, and 75% from 3 to 14 years. Thus, a simple visual classification of curves proves to be reasonably effective.

3. Sex and Social Class Differences in Trends (see Owen, Document A).

Differences in I.Q. scores between different social class groups of school-children and adults are a matter of common knowledge. Much less attention has been given to the emergence of such differences (see Hindley, 1962), and their subsequent course. The size of the present sample, and the fact that it is at best representative of the more cooperative parents and children of an area of central London, makes it inappropriate for attempting to estimate population parameters. Nevertheless, in view of the absence of results of repeated testing of large samples over the age-span of 6 months to 17 years, the present results may be taken as an indication of what may well obtain in the general population, particularly to the extent that they are replicated.

In view of the fact that scores at the different ages are not independent, the use of t tests, or analysis of variance, at particular ages would be an inappropriate way of investigating sex and social class differences in trends of scores. The important part of our analyses has therefore been concerned with differences in trend, by means of multivariate analysis of variance. There is no significant overall main effect for sex (Table 3, Document A), either in the larger Sample A or the smaller Sample B, as indicated by the multivariate F test, although the girls show a fairly consistent gentle fall in scores, relative to the boys' gentle rise. There is a suggestion of sex-social class interaction in the multivariate test for the larger sample ($p = .06$), which would indicate that the relationship of scores to social class might differ in the two sexes.

As regards social class, there is a predominance of subjects with father's occupation at birth in Registrar General's class 3 (here, class II), with smaller numbers in classes 1 and 2 (here, class I), and 4 and 5 (here, class III) (Tables 1 and 2, Document A). The standard score mean curves according to social class, for both boys and girls, display an initial divergence, up to 3 years in girls, and up to 5 years in boys (Figure 1, Document A). The crossover at 18 months in boys is consistent with previous findings, and may be associated with their rather later language development. After the initial divergence, the curves in each social class group of boys run a roughly parallel course to 11 years, with a difference between the upper and lower groups (I and III) of 1.2 S.D. units (24 I.Q. points). There is then something of a convergence in scores at 14 and 17 years, when a different test - the A.H.4 - was employed. In the case of girls the means of the social class groups remain in the expected order from 6 months onwards, again showing a divergence - in this case to 3 years - with a maximum difference of 1.85 S.D. units (37 I.Q. points). Thereafter there is some tendency towards a convergence, which becomes more marked after 11 years. The significance of the differences in trends of curves, as distinct from differences in overall level, for the multivariate test on sample A up to 14 years is at the $p = .07$ level, but attains $p = .01$ for sample B up to 17 years. Consistently with the shape of the curves, this difference is predominantly in the quadratic (curvilinear) trend (sample A, $p = .01$, sample B $p = .001$). Thus, the social class differences become substantial by 3 years, remain in clear evidence up to 11 years, and appear to converge somewhat thereafter. To what extent this convergence may be an artefact of the change in test is considered later. It is to be noted that curves based on social class measures at 14 years, as against social class at birth, yield broadly similar curves.

An aspect of studying social class differences which has received very little attention, and the same applies to comparisons between other criterion groups in developmental research, is the extent to which mean

curves for a group portray what is typical for constituent members of it. This problem is of major importance where trends are concerned, because averaging may well conceal the variety of individual trends to be found within any criterion group. The extent of such variation is obvious from a cursory glance at the individual curves in Fig. 2 (Document A), which differ both in amplitude and in form, and, more systematically, from applying our classification of trends (Hindley and Owen, 1979), as in the Table.

Profiles by Social Class (F's occupation) - 6 months to 17 years.
(Here I = Registrar's 1 and 2, II = his 3, III = his 4 and 5.)

	Class (Registrar General) I	II	III	
Up	2	9	3	
Up with Hump	5	4	1	
Hump	6	3	0	
Horizontal	3	13	3	
U	0	4	4	
Down with U	1	7	2	
Down	2	7	5	
	19	47	18	N = 84

The horizontal mean curve for class II can be seen to be characteristic of less than a third of subjects in that group, which contains within it every variety of curve. Lesser, but still substantial, departures from the mean trends are to be found in classes I and III.

It follows that although social class accounts for significant amounts of variation in amplitude and trend of scores, a substantial proportion must depend on other factors. Secondly, that average trends for groups cannot necessarily be taken as typical of their individual members.

4. Comparison of Sex and Social Class I.Q. Trends in Three European Samples. (see Owen, Document B).

By virtue of our longstanding collaboration with similar longitudinal studies through the Centre International de l'Enfance, Paris, it was possible to examine how far our results up to 14 years may be generalizable more widely. Similar methods were employed as in the previous section.

The findings concerning sex differences (Table 2, Document B), are contradictory, which is not surprising in view of the relatively small differences commonly reported. There are no significant differences in level for the London and Brussels samples, but a tendency in the Stockholm sample towards slightly higher scores for girls than boys, which is significant at 18 months and 3 years (p: .002, p: .004). Only in the Brussels sample did differences in trend attain significance (multivariate, p =.03), mainly in the linear component (p =.03), with boys rising and girls falling.

As regards social class differences (Fig. 1, Document B), several aspects merit comment. The usual differences in level are highly significant for the London and Stockholm samples, across all ages from 3 years, but not in the Brussels sample. The anomaly lies in the unusual curve of class 4 and 5(Registrar General) boys, the reasons for which are not clear, but may be an expression of sampling variation - in view of the fact that only 9 boys are involved. In all three samples the early crossover phenomenon, with the upper groups scoring lower in infancy, is displayed in

One curves of the boys which lends considerable support to its generality, at least in advanced western societies. Interestingly, and inexplicably, it can also be seen in the Brussels girls.

The multivariate test of differences in trend only attains significance for the Stockholm sample ($p = .02$), but as the three samples are independent the combined probability of social class differences in trend is highly significant. The results are somewhat contradictory as regards the components in which the social classes differ. In the Stockholm sample both linear and quadratic components are involved; in the London sample, only the quadratic component; and in the Brussels sample no component attains significance, but the cubic is borderline ($p = .07$). It seems reasonable to conclude that the significance of the early divergence, and later parallelism, in the London and Stockholm samples, is betokened by the significant quadratic components in both cases. The Brussels girls appear to follow a similar pattern, but the Brussels boys appear anomalous.

The lack of any tendency towards convergence of the mean scores of the three social classes after 11 years, in the Stockholm sample, supported by the significant linear component, calls in question the generality of the convergence occuring in our sample. As a different test was used at Stockholm at 14 years, this leaves open the possibility that our convergence is attributable to the particular test employed (A.H.4), or that it may reflect socio-cultural differences. The latter interpretation would gain some support from the later convergence in the Brussels sample (Fig. 1 Document B), but as the curvilinear components did not attain significance, the issue remains open, as it does from other data (see Owen, Document A).

5. A Clustering Approach to the Study of Curves of D.Q. and I.Q. (see Owen, Document C).

Two methods of examining differences in the form of individuals' curves were outlined in Section 2. The only other systematic approach to this problem in the literature, has been that of McCall et al. (1973) and Honzik and Berenbaum (1974). It was considered worthwhile applying this to see, on the one hand, how far it would yield similar groupings of curves to those of McCall, and, on the other, to those achieved by our visual classification.

The previously employed standardized test scores at each age were intercorrelated and subjected to principal components analysis, both in Sample A (up to 14 years) and Sample B (up to 17 years). In each sample the first two components accounted for around 77% of the variance, and they alone were used further. It can be seen in Fig. 1 (Document C) that tests at the later ages load almost exclusively on the first component - labelled 'late', and the infancy tests on the second component - labelled 'early'. Tests at other ages load on both components.

Cluster analysis was applied to the bivariate distribution of component scores, which generated a stable configuration of six clusters in each sample (Fig. 2, Document C). It can be seen from the analysis of variance of the clusters of curves (Table 1, Document C) that there are highly significant differences between them in means ($p = .0001$), multivariate trend ($p = .0001$), linear and quadratic trends ($p = .0001$), and somewhat less so in cubic trend ($p = .02$). Interestingly, the by eye procedure succeeded in detecting differences in each of these parameters, with the exception of the cubic component.

Examination of the individual curves in each cluster (Fig. 3, Document C), and of the position of the clusters in the bivariate distribution (Fig. 2, Document C), suggests that the principal component and clustering procedure has given considerable weight to amplitude, which was ignored in the visual classification, as well as to trends of the curves. The present method of classification thus cuts across that of Section 2. The types of curves included in each cluster may be characterized as follows:-

Group 6 - consistently high amplitude, with a suggestion of a hump shape;

Group 5 - consistently low amplitude, with a suggestion of a U shape;

Group 2 - average amplitude, rising from a lower level early, then flattening out;

Group 3 - lowish amplitude, but U shaped;

Group 4 - rising trend, from low initial, to high terminal amplitude, with some instances of hump-shaped curves;

Group 1 - falling trend, from a high initial level to an average or lowish level, with some U shaped curves.

The clusters were compared on a number of other variables which it was thought might be related to them.

Anoxia at Birth. There was no significant association between anoxia, present in 22 subjects, and cluster (Table 2, Document C).

Sex. There is a suggestion of an association, but it is not significant ($p < 0.10 > 0.05$).

Social Class. There are highly significant differences between the clusters, in terms of a threefold categorization of Registrar General's social class ($p < 0.001$) (see Table 3, Document C). The bulk of Class I subjects are in Group 1, with high amplitude, or in Group 2, with average amplitude, rising from an earlier lower level. None are in the low amplitude Group 5, only 1 in the lowish amplitude Group 3, and 2 in the rising to a high terminal level, Group 4. Class II subjects are widely represented in the clusters, with the exception of the consistently low amplitude Group 5. The bulk are fairly evenly divided between Group 6 (consistently high), Group 2 (average amplitude), Group 3 (lowish amplitude), and Group 1 (falling trend). The largest number of Class III subjects (6) is found in Group 5 (consistently low amplitude), with 4 subjects in Group 1 (falling trend), but another 4 subjects are in Group 4 (rising trend). Only 1 is in the consistently high amplitude Group 6, and none in the average amplitude group.

In summary, the majority of subjects in each social class group conform to expectations, but a number stand out as striking exceptions.

Maternal Characteristics in First 5 Years. The findings are not very clear-cut, and warrant further examination, but a number of suggestive patterns emerged. Mothers of Group 4 (rising trend) subjects were the most cheerful, and those of Group 5 (consistently low amplitude) the most depressed, and the least likely to show pleasure at the child's achievements. Those of Group 1 (falling trend, from high initial level), perhaps not surprisingly in this early period, were the most likely to display such pleasure. Mothers of Group 2 (average amplitude, rising from a lower level) expressed most doubts about their capabilities, whilst Group 3 (lowish amplitude, U shaped) became progressively more dissatisfied with their child. The impression gained is that to some extent the mother's feelings reflect the child's performance, and to some extent her state may affect its performance. Some

of the contradictions are exemplified by mothers of Group 6 (consistently high amplitude), who are at the same time cheerful, but worried about the child's development.

Maternal Child-Rearing Attitudes. These were assessed by the Parent Attitude Research Inventory (PARI), administered when the children were aged 8 years. The biggest differences were found between mothers of Group 5 (consistently low) and of Group 6 (consistently high), who also differ greatly in social class. The Group 5 mothers expressed attitudes more disciplinarian and distancing from the child; Group 6 mothers were lenient and accepting. Group 1 (falling trend) and Group 3(lowish amplitude) mothers were similar in attitudes to Group 5, while Group 4 (rising trend) were similar to Group 6.

It may be concluded that this method of analysis has been successful in distinguishing broadly different patterns of development of general abilities, patterns which are related to social class, to mothers' personality characteristics, and to their child-rearing attitudes. Some of the contradictions and complexities may be taken as being in keeping with the complex nexus of relationships between parents and children.

II. INTERRELATIONSHIPS BETWEEN DIVERGENT MEASURES OF CREATIVITY AND THEIR STABILITY FROM 15 TO 17 YEARS. (See Howie et al., Document D).

In order to obtain measures of at least some aspects of creativity in adolescence, as an outcome variable to be related to features of earlier development, two short tests of divergent production were used at 15 years, and two longer ones at 17 years, alongside the Barron Welsh Art Scale. Three major questions were tackled in the analysis. One concerned the working out of suitable scoring systems. A second concerned the interrelationships between the different measures. The third concerned stability on these measures, between 15 and 17 years. Answers to these questions were seen as an essential prerequisite before the measures could be used as serious criterion variables.

The Tests.

15 Years.

Uses Test: of a brick, and of a spoon. Subjects were asked to write down all the uses of each, with a time limit of 4 minutes for each.

Consequences Test: of a hole being bored through the earth. Subjects were asked to write down all that might happen, with a time limit of 4 minutes.

17 Years.

Uses Test: of a brick, barrel, paper clip, tin of shoe polish, and a blanket (no time limit).

Word Meanings Test: bit, duck, bolt, fair, fast, pitch, pink, port, sack, tender. Subjects were asked to write down as many meanings for each word as they could (no time limit).

Barron Welsh Art Scale: as a test of complexity preference, perhaps related to convergence-divergence.

Subjects Available.

These amounted to 114 at 15 years, 102 at 17 years, and 96 at both ages (56 boys, 40 girls). The common sample was used for longitudinal purposes. As in previous sub-samples, the social class range is extensive.

Scoring of Fluency, Flexibility, and Originality.

From Guilford and Hoepfner's (1966) 16 factors of divergent production, fluency, flexibility and originality, the three most commonly used, were selected for scoring from the Uses, Consequences, and Word Meaning tests.

Uses Test (15 and 17 years).

Fluency: was measured by the usual method of counting the number of relevant responses.

Flexibility: this is a measure of the number of shifts in response categories, given by the subject. What constitutes a response category has often been a rather arbitrary and ill-defined matter. A great deal of time was therefore spent in trying out more formalized criteria for defining categories of responses. One of these was based on thematic content, e.g. domestic, adventure, mechanical/scientific, etc. Unfortunately it was not uncommon to find a response classifiable under several rubrics, and sometimes it was not clear which theme the subject had in mind. This method was therefore abandoned. The other scheme of classification, which was used at the same time, proved much more manageable. This was in terms of the kinds of operations referred to, such as hanging things up (common with paper clips), or storing things (common with barrel).

All categorizations were examined by the three authors, and agreement reached by discussion. The Flexibility measure then consisted of the number of distinct operations referred to for an item.

Originality: this is typically assessed in terms of the rarity of the response, with some kind of weighting system. Here we used two measures:

Originality (a) based on the rarity of the operations involved;

Originality (b) based on the rarity of the raw responses.

Consequences Test (15 years).

Fluency: number of relevant consequences.

Flexibility: number of categories of consequences. The operations classification of Uses did not prove suitable, and an agreed ad hoc classification of 19 categories was worked out.

Originality: based on rarity of raw responses. Here we did not experience the problems occurring with Uses, of simple repetitive responding, so a scoring based on rarity of categories was not considered necessary.

Word Meanings. (17 years)

Fluency: number of relevant responses.

Flexibility: number of distinct meanings given, based on agreed criteria.

Originality: for similar reasons to those applying with Uses, this was measured by the rarity of the meanings referred to.

Composite Scores For Each Age.

Except for the Barron Welsh, standard scores were computed for each subject on each test separately. Composite scores represent a summing of such standard scores.

Results.

Sex differences in Scores (Table 2, Document D): These are not great, but boys score significantly higher than girls on most measures, and significantly so on three originality measures. consistently with boys slightly higher I.Q.'s at 14 and 17 years. The variance of boys' scores is generally higher than that of girls, and significantly so on over half the measures.

Consistency of Performance Within Age.

The first issue concerns the extent to which scores for fluency, flexibility, and originality, on one item, are related to scores for the same variable on every other item. For boys, on the Uses Test, encouragingly high r's of .57 to .78 were obtained. Consistency is rather lower for the girls, with r's ranging from .25 to .71, and significantly different in 10 out of the 30 pairs of correlations (Table 4, Document D). Across tests, r's are somewhat lower, ranging for the most part between .40 and .68 (Table 7), which is still reasonably high for individual item comparisons.

The second issue concerns relationships between scores on the three variables. Within a particular item of the Uses Test, the correlations turn out to be very high, mostly between .8 and .9, ranging from .64 to .99 in boys, and from .51 to .98 in girls. The variables are thus far from independent. The same is true across individual items, though the correlations are somewhat lower, as might be expected, with a range of .54 to .82 in boys, and .26 to .72 in girls. Here, too, the girls display significantly less consistency within measures at one age (Table 5). When total fluency, flexibility, and originality scores for a whole test are intercorrelated, most of the correlations attain a level which would be judged high for a measure of reliability of the same variable (Table 6). In boys, all such r's for the Uses Test are between .82 and .99, and in girls from .76 to .99. The values are slightly lower for the Consequences and Word Meaning tests.

Across tests (Table 7), the values are lower, but mostly substantial, particularly between Uses and Word Meanings at 17 years, when both tests contain more items than those used at 15 years. The Composite Scores, summed across all items at an age, display a level of correlation between the three variables which again reaches a desirable reliability level within a variable, with r's for boys at 15 years of .81 upwards, and for girls of .69 upwards; at 17 years .91 upwards for boys, and .88 upwards for girls.

Thus, the internal consistency of the measures at one age is high; the three variables are very highly correlated with each other; and boys display greater consistency across items than girls. It is to be noted that the Barron Welsh Art Scale has very little relationship to the other measures.

Consistency of Performance Between 15 and 17 Years.

It would be rather surprising if correlations between scores on the one common item across the two ages - use of a brick - were high, but all are positive. Among girls they range from .34 to .57, but among boys only from .21 to .33 (Table 9). For the common test - Uses - the correlations for the three variables range from .63 to .71 among girls, and from .41 to .48 among boys. Correlations across items, for a particular variable, tend to be of a similar order to those involving the same item, with the exception of those involving Consequences, in boys. Consistent with the high degree of interrelatedness of the three variables, the cross-variable correlations over age are of a similar order(Table 10).

The main question, to which all the foregoing data are subsidiary, concerns the stability of composite scores on fluency, flexibility, and originality, between the two ages (Table 11). For the combined sexes the correlations are

al between .54 and .64, with slightly higher values for girls, and slightly lower for boys, though not significantly different. Thus there is approximately 30 to 40% of common variance across the two ages. The stability is therefore moderate, but well below the correlations of I.Q.'s across the two ages, namely .87, involving about 75% of common variance.

Conclusions.

The scoring of the tests for fluency, flexibility and two measures of originality, has resulted in sets of measures which display high internal consistency within one age, and which are highly related to each other. However, the degree of medium term stability of these measures is only of moderate degree, and considerably lower than that found with I.Q.'s. This may partly be due to the small number of creativity tests employed at 15 years, rather than to a lack of stability in the underlying variables. It is noteworthy that the Barron Welsh Art Scale showed little relationship to the other measures.

III. PERSONALITY MEASURES AT 15 AND 18 YEARS, AND THEIR STABILITY.

As with the measures of creativity, the aim had been to obtain outcome measures in adolescence, in this case for important dimensions of personality. As few satisfactory instruments exist, there had been little alternative to using Cattell's H.S.P.Q. at 15 years, and his 16 P.F. at 17 years, despite doubts about the validity and reliability of his sixteen or so factor measures. The aims of the analysis were twofold: firstly to investigate the nature of the measures at each age, and secondly to examine the extent to which personality measures at these ages represent stable characteristics of the subject. It is recognized that evaluations of personality based on self-report may not necessarily conform to observed behaviour, and that the most prudent position is to regard these measures as expressing the subject's view of himself.

1. Personality at 15 Years As Measured By the H.S.P.Q. (Form A) (Document E).

Subjects.

Protocols of 115 subjects (68 boys and 47 girls) were available. The subsample is of widely varied social class composition.

Homogeneity of the Sub-Scales.

In view of the relatively low homogeneities (internal consistencies) reported by Cattell, it was considered advisable to compute these for the present sample. Hoyt's analysis of variance method was employed for this purpose. The resulting coefficients range from .13 for Scale Q_2, to a maximum of .66 for Scale I. Although these values are above those for Cattell's sample (Table 2), they were considered far too low for criterion measures.

Means and S.D.'s.

These were compared with data from Saville and Finlayson's (1973) standardization sample of 2429 British subjects of mean age 14.35 years. Means of our boys differ significantly on 6 scales, 3 of which are of low homogeneity, and of our girls on 3 scales, one of low homogeneity. There are no significant differences in variance. The directions of difference suggest that our sample may have been more prepared to be frank than the standardization sample subjects. Sex differences are similar to those in the standardization sample. The significant ones are in the direction of boys being more extraverted (A, F, H), more unruffled and stable (C), and girls being more tender-minded (I).

Factor Analysis.

Because of the low homogeneity of the sub-scales, and of the extensive literature which indicates that much of their variance can be accounted for by a few broad factors, the scale scores with reliability above .3 were intercorrelated, principal factored, and subjected to Varimax rotation. Three factors account for 66% of the common variance (Table 3).

Factor 1 is rather obviously a general emotionality, neuroticism or anxiety v. stability factor.

Factor 2 is equally clearly an extraversion-introversion factor.

Factor 3 is rather clearly a tough v. tender-minded factor.

In seeking to identify the nature of the factors, a careful examination of Cattell's descriptions of the 16 Scales, and the evidence available for characterizing them, led to considerable doubts concerning what they could be taken to measure. Adopting the standpoint that subjects are making self-reports in response to each item, the wording of the items was scrutinized and the scales were named in terms of the items most highly correlated with a particular scale (Appendix, Document E).

Factor scores on each of the three factors subjected to two-way analysis of variance, yielded no evidence of social class differences, but a highly significant sex difference on tough v. tender-mindedness ($p<.001$).

2. Personality at 18 Years As Measured by Cattell's 16 P.F. (Form E). (Hedjuck and Hindley, Document F).

Form E, a recent experimental version of the inventory for use with low literate subjects, was employed for maximum comprehensibility by our sample of very wide ability range. Standardization data are limited, and there has been no British standardization.

Subjects.

Protocols of 70 subjects (43 boys and 27 girls) were available.

Homogeneity of the Sub-Scales.

These proved to be considerably higher than for the H.S.P.Q., with a maximum of .82 for Scale I (tough v. tender-mindedness). Only one was below .30 (M), and therefore not included in the factor analysis.

Means and S.D.'s.

There are no adequate data from a sample of similar age with which comparisons could profitably be made. Within the sample the sexes differ significantly on 8 of the scales, with girls scoring higher on traits concerned with helpfulness and sociability (A), conscientiousness (G), tender-mindedness (I), and asthenic emotions (O, Q_4). Boys scored higher on traits of a sthenic type (C, E), and on practical tendencies (Q_3).

Content of the Scales.

As with the H.S.P.Q., it was considered advisable to scrutinize the nature of the questions most highly correlated with the total score for each scale. Our descriptions, and the biserial correlations are to be found in Document F (Appendix).

Factor Analysis.

Fifteen scales with a homogeneity of .3 or higher were intercorrelated, and principal factored, followed by Varimax rotation. Six factors satisfied Kaiser's criterion, and accounted for 76% of the common variance (Table 1).

Factor I neuroticism, anxiety, general emotionality. v. stability;

Factor II extraversion-introversion;

Factor III dominant intolerance v. submissive compliance;

Factor IV tough v. tender-mindedness;

Factor V radicalism, casualness v. conservatism, conforming;

Factor VI verbal intelligence.

Sex and Social Class Differences in Factor Scores.

No significant social class differences emerged, but there were two highly significant sex differences, with girls scoring higher on emotionality and tender-mindedness ($p < .0001$).

Conclusions.

The two factors of neuroticism and extraversion-introversion account for most variance, though not as much as at 15 years on the H.S.P.Q. They, and tough v. tender-mindedness, display sufficient similarity to the 15 year factors to warrant investigation of scores on these factors across the two ages.

3. Stability of Personality Measures From 15 to 18 Years. (Medjuck and Hindley, 1974).

Cattell's Sub-Scales.

Product-moment correlations between scores on the 12 sub-scales common to the H.S.P.Q. at 15 years, and 16 P.F. at 17 years, proved to be low, ranging from .08 to .37, apart from the higher value of .50 for tough v. tender-mindedness. These results are hardly surprising, given the low homogeneities of the scales, especially at 15 years.

Correlations between our second order factor scores across the two ages are substantially higher, attaining .55 for neuroticism or emotionality, .51 for extraversion-introversion, and .50 for tough v. tender-mindedness. Correlations with the shortened version of the Maudsley Personality Inventory, used at 17 years, provide some modest evidence of a similarity of our factors to Eysenck's. For neuroticism (17 years) with neuroticism (15 years) r is .49, and for 17 v. 18 years, r is .41. For extraversion, over 15 v. 17 years, r is .23, and for 17 v. 18 years r is .39. It is to be noted that none of these correlations are as high as those between our factor scores over a longer time interval.

Conclusions.

On the present evidence there are no grounds for considering that Cattell's many scales provide measures of stable characteristics. Perhaps the correlations over time would prove higher if a double length inventory had been used at each age, as Cattell recommends, but his own figures for the internal consistency of the longer scales do not offer great encouragement.

The second order factors provide a more satisfactory measure, but, with correlations of around .5 (and therefore only 25% of common variance) over 3 year interval, it can hardly be claimed that these are measuring highly stable characteristics. There is clearly a great deal of change occurring in the individual subjects. These results are generally consistent with those emerging from the work of Giugannino and Hindley (1976) based on ratings of personality variables at younger ages (see below). Among 145 neurotic adults Ingham (personal communication) obtained r's of .59 to .66 on M.P.I. scores of E-I and N over a 3 year period, and mothers of our subjects showed a slightly lower degree of stability on the abbreviated M.P.I. over a 5 year interval. Thus, on Ingham's figures, there is less than 45% of common variance in scores across a 3 year period. It cannot, therefore, be concluded that N, E-I, and tender-mindedness, emerge as stable characteristics in late adolescence. Rather are measures of these characteristics to be regarded as referring to the subject's state at the time, or his evaluation of his state, which apparently continues to undergo change. This underlines the need, which has been brought out in our work on I.Q. curves, for studying the progression in measures over time, during adulthood as well as in childhood, rather than considering measures at one point in time as being concerned with unchanging characteristics of the individual.

IV. FINDINGS FROM ASSOCIATED WORKERS.

These are more briefly outlined, as they did not issue directly from the SSRC's support. However, both the personal work of Professor Moore, and that of Dr. Giugannino supported by the Leverhulme Trust, can be seen as a useful spin-off which adds to the overall production of the project. The continuing existence of a small research team, which was able to help them in making data available, in techniques of analysis, and in computing, greatly facilitated their work.

1. Outcome in Adolescence According to Substitute or Mother Only Care in the Pre-School Period. (T.W. Moore, 1975, reprint attached.)

This study is concerned with a follow-up of subjects (24 boys and 24 girls) who had experienced at least 12 months of care by others during the pre-school period, for at least 25 hours per week, compared with a group which had been exclusively cared for by the mother (31 boys, 26 girls). The two groups displayed relatively minor differences in background characteristics (Table 1, op. cit.). Many workers have viewed substitute care as at best potentially harmful, but Moore looks at both positive and negative features of the two groups of subjects.

Comparisons were made on a wide variety of data from 6 to 15 years, including: inventories on the child's behaviour, completed by the mother; Parent Attitude Research Instrument scores; responses to a variety of personality tests and standard play situations; inventories on interests and worries; interview answers at 15 years, concerning sex role preferences, preferred periods of life, attitudes to marriage; psychologists' ratings on the subject's behaviour; and aspects of school attainment.

The results are complex, but the major differences in boys are that the "mother only" group tend to be significantly more controlled, less assertive, more anxious, more sensitive, more concerned to have adult approval, to read better at 7 years, to remain at school till 17 years, and to have more 'O' level passes. The "diffused mothering" group showed significant tendencies towards being more fearless, aggressive, excitable, and to having active interests. The former group was interpreted as being more introverted, adult oriented, and

as having stricter superegos; the latter group as being more extraverted, peer-group oriented, and more prone to "acting out" behaviour. The constants are less clear-cut among girls. At 6 and 8 years, diffusely mothered girls showed more aggressive and ambivalent feelings, while the mother only group displayed more interest in quiet domestic play. By 15 years the former group displayed a more domestic orientation, with thoughts of future marriage etc., whereas the latter group showed more evidence of seeing themselves as active. They also did better academically.

The breadth of the data available and the fact that a considerable amount was obtained before the beginning of substitute care, made it possible to compare the two groups of subjects in terms of earlier behaviour, and in terms of general differences in their mothers. Little in the way of differences in subjects' behaviour prior to 3 years was detectable. What differences there were in mothers' attitudes showed much less relationship to subjects' characteristics than was the case with differences in régime. It is concluded that some diffusion of the caretaking role after 3 years of age has both positive and negative features for the later development of the child.

2. Attitudes of Life in Children and Young Adolescents. (T. Moore and S.E. Clautour, 1977, reprint attached.)

Replies were analysed of 66 boys and 48 girls to questions put at 7, 12, and 15 years, concerning their views on advantages and disadvantages of various periods of life, of being a boy or girl, man or woman, and of marrying and having children.

As regards general trends in the sample, several tendencies are of interest:-

attitude to present age which was predominantly positive at 7 years, had shifted to more often negative at 15 years, which the authors relate to both developmental changes in general awareness and cognitive level, and to the place of young people in our society;

attitude to being a grown-up: rather than a clear positive or negative shift, the predominant change is towards greater discrimination concerning positive and negative features;

preferred age: while a substantial minority at 7 years viewed adulthood as the most desirable period, the majority preferred present age; increasingly by 12 and 15 years the majority preferred ages older than present age, with grown-up life seen as offering freedom and independence, but adult work was seldom regarded in a positive way;

preference for being boy or girl: the majority at all ages preferred own sex, and no significant age differences emerged;

preference for man's or woman's life: moving from a predominance of own sex preferences at 7 years, by 15 years the largest number of both boys and girls prefer a man's life, but it is noteworthy that roughly a third of both sexes are uncertain;

attitudes to marriage and parenthood: generally positive at all ages for both sexes, but greater qualification with increasing age; at 15 years companionship was commonest reason given for marriage.

Relationship to other Variables.

I.Q.: although this has a relationship to attitudes in both sexes, the sex differences remain on sub-samples matched for I.Q.; only one attitude correlated significantly negatively with I.Q., namely to own age at 15 years (r -.40 boys, r -.33 girls);

social class: no significant differences among boys; among girls, the socially favoured thought more positively of marriage at all ages, and showed several signs of being more hopeful of the future;

physical maturity: tends among the girls to be positively correlated with preference for own sex role, for grown-up life, and with positive attitude to marriage; boys showed small negative correlations with preference for own age, and with positive attitude to marriage;

consistency in attitudes over time: little consistency was displayed between 7 and 15 years, with only one barely significant correlation; somewhat more consistency, but only of modest magnitude, was displayed over shorter intervals with 9 out of 32 r's exceeding p.05.

Conclusions.

It is noted that the majority of subjects who were "happy, confident and full of zest for learning at 7 years, became progressively less happy, less confident, and more depressed in their attitudes both to their current age and to adult life, as they moved into adolescence" — "both school work and adult work lost their appeal and became equated with drudgery." An examination of comparable results from other western societies suggests that these findings are not atypical, and it is concluded that some other societies seem able to foster more positive attitudes in their adolescents towards their future role, and worth, in society.

3. Continuity of Personality Patterning, and Stability of Individuals' Characteristics from 3 Years to 15 Years. (E.M. Giuganino and C.B. Hindley.)

Two issues have been investigated. One concerns the continuity of patterning of personality variables across the ages of 3, 7, 11, and 15 years. The other concerns the stability of subjects' scores on the variables.

As a deliberate choice, in view of the evidence favouring the employment of broad personality variables, and the ubiquity of emergence of some such factors as extraversion-introversion, and neuroticism or anxiety or general emotionality, in factor analytic work, lists were prepared of traits which commonly load on these factors, and on which we have data in our records. Using data both from interviews with mothers, and from records of psychologists' observations of the child in testing and interviewing sessions, each subject was rated by Giuganino on 23 specific variables, on 3 kinds of problem behaviour, and globally on E-I and N, a very time-consuming procedure. A whole round of ratings was made at one age before the next age was tackled. Inter-rater reliability proved to be reasonably satisfactory.

The traits have been factor analysed separately at each age, and convincing E-I and N principal factors emerged. After suitable rotations the evidence is strong that the patterning of the variables is very similar at the four ages. Varimax rotation permitted two further factors to be identified at each age: an activity factor, and a "choleric" or sthenic-emotion factor.

Having established the similarity of patterning of the factors across the four ages, the stability of subjects' factor scores, and scores on the specific variables, were investigated. Consonant with the Hindley and Medjuck results (Section III, above) correlations based on broad factor scores display a higher degree of stability than those based on more specific variables. Nevertheless, despite the similarity of the factors at the four ages, the degree of stability of scores is only modest, rising from around .30 between 3 and 7 years, to a median of around .55 between later adjacent ages, with some higher values among girls.

Details of these results are being written up currently, but it is clear that there is less stability of personality measures, even when broad, than of measures of general ability; and, perhaps most importantly, that the most fruitful way of studying trends in personality development, when comparable measures are available, as here, is likely to be by comparing individual curves on such measures, in a similar way to that employed with I.Q. measures.

4. Some Socio-Psychological Correlates of I.Q. Changes in a Longitudinal Study of London Children. (K.A. Hopkins, M.Sc. dissertation, 1978.)

Subjects in the seven groups according to trends of I.Q. curves (see Section I) were compared on a variety of perinatal, ethnographic, and personality variables, other than those already investigated. No significant associations of trend were found with: birth weight, neonatal anoxia, season of birth, maternal age, family size, birth order, and sex of older sibling.

Some significant associations were found with:

presence of younger sibling in first 5 years: Hindley (1961) had found from the same sample, a significant association between presence of a younger sibling and downward slopes of I.Q. curves up to 5 years, most marked in boys; here, up to 17 years, the trend remains in the same direction but non-significantly; very puzzling, however, is a highly significant tendency for girls without younger siblings in the first 5 years to have downward sloping I.Q. curves;

reading at 7 years: a significant association was found, which appeared to depend more on level of I.Q., than on trend of curve;

mothers' verbal scores: a significant (p.05) curvilinear relationship was found, with mothers of both upward and downward trending subjects scoring higher, and mothers of subjects with horizontal trends scoring lower;

personality measures: using Giuganino's factor measures, a number of significant associations emerged:

> overactivity and conduct problems at 7 years are significantly related to trend in a rather complex way, but with high values not associated with upward trends;
>
> high choleric scores at 7, 11, and 15 years are associated with downward or "hump-shaped" curves of I.Q., indicating a generally downward tendency of I.Q. from middle childhood.

In the limited time available, Hopkins was only able to treat the curves in a categorical way. It would be desirable to follow up his preliminary work using multiple analysis of variance techniques, and taking systematic account of both level of I.Q. and trend of I.Q., at the same time.

CONCLUSIONS.

In attempting to review the overall lessons of the project, it seems worth looking at generalizability of the results, their specific and general implications, at the place of, and need for, longitudinal research, and of the problems facing this kind of research, along with some suggested solutions.

I. REGARDING METHODS AND FINDINGS.

1. The Problem of Generalization.

The fact that our results derive from a more or less biassed sample has to be acknowledged. Without essaying far into the history of the biological and human sciences, there is a good case for believing that many of the important discoveries arose from the study of quite small numbers of individuals. This has often been true in medical science, and it has been true of Pavlov, Piaget, Skinner, and others, in the behavioural area. Often, it has only been in the later replication and confirmatory stages of research that issues concerning generality of the findings have been systematically investigated.

Perhaps as a result of the obvious value of the results provided by Douglas' National Survey and the National Child Development Survey, both of which have been very much concerned with an ethnographic study of population trends, there has been a tendency in this country to expect that a worthwhile longitudinal research should follow such a form, and, that if statements could not be made about the general population, the findings of a longitudinal research would be of little value. This is to confuse the ethnographic survey endeavour, only a part - though a valuable part - of the more general endeavour of the human and social developmental sciences. Were that standpoint generalized to behavioural science as a whole, very little of it indeed would stand up to examination, and virtually the whole of the findings of experimental psychology would have to be rejected.

That would be absurd. It would mean that population statistics, instead of serving as the handmaiden of science, had become its arbiter.

We have taken the position in our work that a sample of very varied backgrounds, albeit somewhat biassed, can yield results which are, plausibly, likely to apply broadly to the general population of central London children born around the same time, probably also - in varying degrees - to British children in general, and very possibly, in a number of respects to children in other developed countries. How far the results are generalizable we see as an empirical question which can only be answered by the procedure, time-honoured in science, of replication. It was never our aim to offer population statistics. Indeed it would be highly uneconomic to have attempted our detailed testing and interviewing programme on large population samples. It is after phenomena have been brought to light from a limited sample that it becomes appropriate, where necessary, to design systematic studies to test their applicability in the general population.

Nevertheless, it is possible to make reasonable guesses concerning the generalizability of our results. To the extent that our sample is biassed there is likely to be a more limited range of variation than in the general population, and, insofar as distributions are therefore curtailed, we can expect that any kinds of obtained correlational measures are likely to be lower than would be found in the population. Errors are, accordingly, likely to be in the more conservative direction, consisting in accepting the null hypothesis when it should be rejected. Descriptive statistics have been regarded on the one hand as a means for placing our sample in relation to the population, on known parameters. On parameters where popu-

lation data are lacking, we have offered our results as suggesting minimal, rather than maximal, ranges of variation in the population. Thus, we are in no position to suggest precisely what proportions of I.Q. curves the population would lie in the categories we have distinguished. If a biassed-sample can yield evidence of such variety, it is reasonable to suppose that there would be at least as rich a variety in the population.

There are also problems concerning the particular tests we have used, the methods of interviewing, and of rating. These are widely occurring problems in the whole field. No claims are made that the methods are not subject to importance sources of error. When possible we have tried to estimate in which directions errors are likely to be, and ways in which they might affect the results. More convincing tests would lie, once again, in results of replications by others.

2: The Work on D.Q.'s and I.Q.'s.

The most important finding, which depends on the kinds of methods we employed, is that not only is the doctrine of constancy of the I.Q. untenable; that there are marked individual differences in the curves of individual subjects' scores; but also that these different patterns of development of ability can be classified into several relatively homogenous groups (Hindley and Owen, 1979), and cannot be interpreted simply as a function of error.

I.Q. is a composite variable, probably best regarded as a sampling of reasoning ability, with a strong verbal component, and with the items involved in yielding a score differing across the ages. The same applies, of course, to any composite variable employed in the study of development (see Hindley, 1972). Thus, the contribution of different components to an individual's height at 17 years is very different from in infancy, but this does not vitiate the use of height as a worthwhile parameter. I.Q. is, in effect, equivalent to a transformation of rank ordering of individuals' performance on the items employed at each age into parametric scores. As a matter of empirical fact, such scores display high positive correlations across adjacent ages, indicating that if they are not measures of quite the same underlying function, there is at least much in common between them; further, the level of correlations of I.Q.'s across ages is higher than with any other psychological developmental variable. This is not the place to elaborate on the nature of measured intelligence, but if it is taken to provide a useful functional measure, it must be recognized that it is one on which individuals' relative status changes, in apparently systematic ways.

Our results also show some of the factors related to the curves, in particular social class, in this and other Europena samples; variables concerning mother's attitudes and child-rearing practices; and suggestions of personality correlates. There remains substantial unexplained variance, and one suspects that a painstaking and time-consuming study of the biographical records might bring to light significant changes in the child's life, accompanying inflection points on the I.Q. curves.

There are much wider implications of these findings, both from a methodological and a substantive point of view. As regards the former, it cannot be too strongly insisted that any method of treating longitudinal data which suppresses what is happening to the individuals involved, will produce results which are highly misleading as regards the form that developmental changes may take, and will render it impossible to discover the kinds of patterning which may occur. Substantively, a measure of I.Q. at a particular point in time cannot be regarded as being of some unchanging characteristic (see also Hindley and Owen, 1978). It can only be viewed as a sounding of a function which is subject to change, apparently systematic, and in directions and amounts concerning which a tester can

at best make very approximate probability statements. There is every reason to expect that much the same will prove to be true of other parameters, during development.

Had the platonic doctrine of the constancy of the I.Q. never been propounded, there would be no more need to emphasize these points than there is to convince a physiologist that blood pressure, or respiratory capacity, change, and do so in lawful ways, nor to convince a sociologist that social attitudes change.

A corollary of the position being argued here, is not simply that there has been an overemphasis on prediction in the individual differences approach to developmental changes, but that any hope of making precise predictions over long periods of time is misconceived. The 'pure' biological sciences such as zoology, botany, or physiology have been far more concerned with investigating the nature and form of processes than of making predictions. Such applied biological sciences as medicine or agriculture have been much more concerned with control rather than mere prediction. These kinds of concerns are increasingly evident in much developmental research, but are only beginning to be seen in the individual differences area.

It also follows that in addition to the "natural history" approach to studying the course of measured ability, there is currently a great need for experimental educational studies of ways of fostering it. The work of Heber and his associates (Heber et al., 1972) points to one way which is apparently proving rewarding.

3. The Work on Creativity.

In the light of the findings concerning I.Q.'s, and in view of the only moderate degree of stability in measures of divergent production between 15 and 17 years, one may take it that this characteristic, too, is probably subject to systematic changes, and needs to be studied from that point of view. Nevertheless, the measures we have derived should prove useful for investigating earlier features to which later divergent production is related.

4. The Work on Personality.

Precisely the same issues arise. Extraversion-introversion, or neuroticism, certainly cannot be regarded as unchanging characteristics. What is now required is study of the patterns of change over time in individuals, and of factors associated with such change. Fortunately, the results of the study supported by the Leverhulme Trust would make it possible for us to examine these issues further, between 3 and 15 years.

Hopefully, as with abilities, it should be possible to investigate the way in which these characteristics change as a result of entering into different kinds of environments, in at least a quasi-experimental manner.

5. The Work on Outcome of Kinds of Early Care.

The results emerging from this work underline the danger of too readily generalizing from clinical experiences with a limited number of deviant subjects, to what may be expected to occur in the normal population, following certain kinds of experiences in early life - a danger to which Clarke and Clarke (1976) have also called attention. In fact, Moore finds that substitute care of the pre-school child can have positive, as well as negative consequences, so that it is probably misleading to describe the outcomes in pejorative terms, but preferable to regard them as alternatives, both of which have desirable features.

From a methodological standpoint, the fact hardly needs much emphasis that a study of this type would have been impossible without long-term longitudinal data, and data which are in very considerable detail.

6. The Work on Attitudes to Life.

While part of this study could have been carried out on cross-sectional samples, questions would arise as to whether the obtained age-differences reflected the different experiences of children born at different times, and therefore experiencing life at particular age-periods under different socio-historical circumstances. The Moore and Clautour findings refer to the same subjects, so that such questions do not arise. It can be asked whether they would be similar in later-born age-groups, which could be answered by conducting longitudinal researches on further samples, and to some extent by cross-sectional researches.

The findings themselves are of particular interest in the context of the SSRC Psychology Committee's recent recognition of the relative dearth of research on the adolescent period (Schaffer and Hargreaves, 1978). Issues arise concerning the way in which the views and aspirations of the group change with their experience of life in early adulthood, and concerning ways in which individuals' responses to the developmental tasks of this period - finding an occupation and settling into it, entering into relationships with the opposite sex and starting a family, forming a personal philosophy of life - are related to their earlier conceptions and aspirations.

II. THE EXTENT OF WHAT HAS BEEN ACCOMPLISHED.

Probably few writers of research reports are in the happy position of having accomplished all they had hoped and planned to do. Certainly I would have wished that we had been able to achieve more. Three major factors, which have already been referred to, seriously affected the progress of the work. One was the difficulty of solving statistical and computing problems relating to a proper analysis of individuals' curves. A second was the change in personnel, and the inexperience of the new workers. A third, affecting the amount of data punched, arose from changes in computer technology.

The first problem has now been solved, and we have suitable methods for tackling problems of this type. Furthermore, the new Statistics Department of our Institute has great strengths in this area. Avoiding the kinds of personnel changes which arose is discussed below. The punching of old data is a problem which could be solved with suitable clerical assistance.

It is true that less of the results have been published so far than one would have wished. This, too, has largely been a result of personnel problems. Material that Miss Munro was engaged in writing up was in an incomplete form, and the threads had to be taken up again by new workers. I had to devote all my research time to initiating them and closely supervising their work. I also took the view that it was politic, under the circumstances, to proceed with as much data analysis as possible while they remained with the project, even if that meant the results would gradually have to be published in ensuing years. It is also the reason why this report was not produced earlier.

It is not immaterial that had there been a proper career structure for research workers in this area, the writer would have been pleased to devote himself predominantly, or entirely, to the research, rather than having to combine it with the career of being a university professor, with heavy departmental policy, administrative, teaching and supervisory activities.

Despite the difficulties, a good deal has been accomplished, and, as suggested above, some of the findings represent a new contribution to knowledge. Looked at in perspective, it would be unrealistic to expect that an adequate analysis of the many aspects of the richness, which it took 17 years to collect, along with a proper examination of interrelationships in development, would have been possible during a 5-year period. A rule of thumb in research is that it takes at least as long to analyse and write up data as it does to collect them, and a research of this kind is no exception. Indeed, precisely because of its complexity, a great deal of time can profitably be spent working on the data, the more so because such data are extremely scarce.

It is very relevant to note in this context that some of the most significant findings issuing from the U.S. longitudinal projects at Berkeley (Bayley, 1970; Bronson, 1967, 1971; Jones et al., 1971), and the Fels Study (Kagan and Moss, 1962; McCall et al., 1973), have been produced years after the original data were collected. There is no doubt that a good many years of continuing work would enable us to investigate many further questions of importance, and, as more were tackled the possibilities for exploring their interrelationships would correspondingly increase.

II. THE PLACE OF A LONGITUDINAL STRATEGY IN DEVELOPMENTAL RESEARCH.

The writer would not wish to be regarded as believing that one research strategy, the longitudinal, offered the royal road to success in developmental research. There has been too much waxing and waning of enthusiasms in the developmental field, as in much of psychology, and for that matter in the social sciences as a whole. A more balanced view must take account of the many-sidedness of development, the continuous interactions occurring among processes, and there must therefore be a preparedness to employ whatever methods may be appropriate for tackling particular problems, on a rational basis.

Some of the main contributions that can be made by a longitudinal strategy were referred to earlier. The central value of a long-term longitudinal research lies in the possibility of examining the course of development in individuals, the different patterns of development they may display, and comparing the development of groups classified in terms of their developmental similarities, or in terms of independent variables. Other findings of value can be regarded as by-products of these activities.

In recent years there has been a recognition, less in Britain than in the U.S.A., though Clarke's (1978) recent Presidential Address to the B.P.S. is an important exception, of the need to develop a life-span developmental psychology, in which the ultimate focus of interest is the course of the entire life of individuals, or at least substantial parts of it. There are a host of pertinent questions to be asked, and answered, about the relationship of earlier to later characteristics, the influences operating during parts of the overall process, and the kinds of individual patternings which occur. Even to try to list these would be far beyond the scope of this report, but suffice it to say that work with other mammals, which are of course much easier to study, has brought to light that different strains have different rates of development, different durations of active adult life, and differing durations of life (Roberts, 1962). There is also evidence that development may be accelerated by diet (Lat, 1960, Cheek, 1968; Scrimshaw and Gordon, 1968), early stimulation (see Newton and Levine, 1968), and that in the case of dietary enrichment this may not merely hasten development, but also result in earlier senility and a shorter life-span (Cheek, 1968).

It is contended that although a good deal of valuable information can be obtained by investigating cross-sectional samples at particular ages, and by comparing subjects with easily determined differences in prior life, many of these issues can only be adequately investigated by means of long-term longitudinal strategies, which require the long-term commitment of funds and resources for their successful outcome. A dilemma here is whether to embark upon survey type studies on large and representative samples, or on smaller, more intensive researches of the present type. Both appear to be necessary: the one to provide normative data on a population, the other to make a careful study of some of the important parameters of change, and their interactions, which would be beyond the scope of survey methods.

A word is necessary on alternative strategies to the one we are concerned with. Unquestionably, it often makes good sense to investigate the course of development over limited parts of the life-span, but the idea of trying to cover the span of development by using a number of samples overlapping in age, with each followed for a few years, goes little way to meeting the needs outlined above. Worthwhile findings can be expected on individuals over the limited periods of longitudinal study, and to some extent on groups over the whole span in question. However, by the very nature of the method there can be no investigation of the long-term patterning of the individual's development, nor of the relationship over long periods of time among variables. The same applies to strategies which Schaie (1970, 1972) has proposed, and carried out. One can agree with him that longitudinal data confound age-changes with the effects of living through a particular historical epoch; and that cross-sectional data confound age changes with the effects of being born at different times. His solution of using cross-sectional samples that are assessed on two occasions, to investigate inter-relationships between historical and developmental changes over the two points in time, obviously has some value. However, it has nothing to offer on the long-term developmental issues with which we have been concerned, and the only way to distinguish those changes occurring in a particular historical period, or in a particular locale, from more generally applicable developmental changes, is by replication in later periods, and in other places. In our own case, at least so far as our I.Q. data are concerned, the descriptive statistics are generally similar to those obtained from American studies begun 20 or more years earlier.

IV. CONDUCTING A LONGITUDINAL PROJECT.

1. The Social, 'Political' and Institutional Background.

Those who were responsible for the original initiation of our Longitudinal Research were obviously persuaded of the value of the kind of long-term research which they envisaged, and were fully prepared to support and facilitate its continued existence. What they were not in a position to do, of course, was to ensure that their successors in seats of power would share their persuasion, nor to envisage that the country in which the work was proceeding would be subject to repeated stop-goes and balance-of payments crises with resulting hasty cuts in university finances, sometimes relieved by equally rapidly occurring periods of relative, but temporary affluence. Had the research workers primarily involved, the writer and Professor Moore, not come to appreciate the potential value of the project to the extent they did, and therefore been prepared to fight hard on a number of occasions, it would undoubtedly have vanished with little trace, many years ago.

It was in one of the periodic belt-tightening phases that the research was threatened with an immediate shut-down, with the subjects aged 17 years, and a serious analysis of the data over the entire age-span yet to be done. At this stage the SSRC support for a data analysis programme was sought, support which rescued the project for a 5-year period.

...k of supporting. Those who see the study of life-span development as one essential area, among others, will be prepared to accept the inevitable unpredictability and messiness, though to be mitigated no far as possible, as a necessary price that has to be paid to increase knowledge in this area.

V. POSSIBLE AND DESIRABLE FUTURE OF THE PRESENT RESEARCH.

1. Data Analysis.

As a result of the work outlined in this report we are in a position similar to that of miners who have extracted a certain amount of ore, but who are well aware of the size and richness of the ore-seams yet to be tapped. We have developed a range of techniques for analysing longitudinal data, which can now be applied to other 'seams'. As one seam is exploited, unlike in mining, the data become available for interrelating with those emerging from others.

Among the things which clearly need to be done, a short, and not at all exhaustive, list follows:-

a) to seek factors in the personal history of subjects which may be associated with inflexions in I.Q. curves, and to bring into the picture areas of ability tested in infancy;

b) to derive individual curves of E-I and N, see what kinds of patterns emerge, and attempt to relate them to general background factors and earlier history;

c) to relate a) and b) to parameters of physical maturity, and to data on body type;

d) to examine relationships between curves in a) and b);

e) to look into earlier precursors of later divergent production, or creativity, measures, including family background, child-rearing methods and attitudes, the I.Q. curves, and the child's previous history;

f) to analyse the data on personal values, interests, social attitudes etc., in adolescence, and then to relate outcome to family background, earlier history, and to a), b), c) and e);

g) to relate Moore's views of life data to some of the variables emerging above.

We have at the moment no funds for carrying out any of the above. If any source with funds available took the view that these data, which are unique in Britain, were worth exploiting further, they could reasonably expect to obtain results of a type which cannot be produced elsewhere in this country, and without having to pay for their collection.

2. A Possible Follow-Up.

Within the life-span developmental psychology framework, a case scarcely needs to be made that a properly financed follow-up study would be very worthwhile. With the present interest in the transition from adolescence to adulthood, there is a clear advantage in studying the early adult life of a sample - occupational choice and adjustment, personal adjustment, family life, etc. - in relation to a considerable body of knowledge concerning their abilities, personality, interests, values, family and educational background, in the adolescent and earlier years. Equally, to obtain a greater knowledge of continuities and patterns in development requires that what happens to them in adult life should be investigated.

Here, too, however, our future was very much subject to a particular set of institutional policies. In making the grant, the SSRC made it clear that it was exceptional for it to support work which had previously been supported by a university. Further, to award a grant for a 5-year period for this purpose was equally exceptional. It is understandable that for most of the kinds of work that the SSRC supports, this is a quite reasonable policy. At the same time, it is not a policy which is conducive to encouraging and supporting this, or any other, long-term longitudinal project.

2. Establishing and Maintaining a Research Team.

If it is regarded as worthwhile to carry out long-term longitudinal researches on development (and ageing), our experiences suggest the importance of making suitable institutional arrangements for maintaining a research team. A model which commends itself is the type of permanent, or relatively permanent, units which the MRC has long had in being, but which have not found favour in the social science area. This would provide for continuing financial provision, and also for a career structure for the research staff, some of whom, at least, could then be expected to make a long-term commitment, which would enable them progressively to increase their command of the complex methodologies required, and make an increasingly valuable contribution.

It is not suggested that such a unit should only be concerned with a longitudinal project. It would strengthen this activity to have it taking place alongside shorter-term developmental studies, in a situation in which there could be profitable interaction.

Depending on the precise aims of such a study, it would be desirable to have team members with complementary kinds of expertise, and a good statistician and programmer would be essential.

3. The Shape of Future Intensive Long-Term Longitudinal Research.

The case for such research has been strongly argued here, and will not be elaborated further. As regards the scope of future projects, while they would obviously benefit from having explicit aims, our experience, and that of American projects, would suggest that once the heavy financial and personnel commitment is made, it is sensible to seek a rather wide coverage of data.

There are several reasons for this:-

a) the original areas of interest may later come to be less relevant to the general discipline of behavioural development;

b) some of the techniques may be superseded;

c) new issues may arise on which it would be valuable to have appropriate earlier data;

d) it is often very worthwhile to relate variables which were regarded as salient from the start, to other aspects of a child's life and development in ways which had not been originally envisaged;

e) in sum, no set of investigators at one point in time has the omniscience to foresee what major changes are most likely to occur in a discipline, nor the matters of interest which are likely to arise during the course of a research.

For those who have a desire that all research should have a cut and dried plan, a longitudinal research programme will always be seen as too messy to

Certain population statisticians will, of course, take the view that the sample available for study in adult life would be too biassed to warrant further investigation. Little further answer can be given than in I.1 of "Conclusions" (above), the essence of which is that we are in a position to study interrelationships of a kind not open to short-term intensive researches, nor long-term surveys. Having brought them to light, it would then be the time to decide in what directions replications on population samples might be worthwhile.

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The attached typescript is a copy of the final corrected draft of an article that subsequently appeared in the British Medical Journal, No. 4897, November 13th, 1954.

To bring the information up-to-date the following points should be made -

Size of Sample. With reference to Table I (page 3) - as a consequence of removals and withdrawals subsequent to the compiling of these figures, the total number of children finally registered was 210 (105 boys and 105 girls). Of these 176 remained in the study at May, 1957 The number at May 1969 was approximately 120.

Staff. Dr. Frank Falkner left the Centre in January 1956 at the invitation of the University of Louisville (Kentucky) to initiate a similar growth study there. His place has been taken by Dr. J M. Tanner, M D., Ph.D., D P.M., formerly of the Department of Human Anatomy, Oxford University, and the Sherrington School of Physiology, St. Thomas's Hospital.

The psychological part of the research is now carried out at the Centre for the Study of Human Development, University of London, Institute of Education, by Dr, C B Hindley and Miss J. A. Munro. The physical part is carried out at the Department of Growth and Development, University of London, Institute of Child Health, by Professor J. M. Tanner and Dr. W. A. Marshall. Dr. T Moore continues to be an Honourary Research Associate. Dr. F. Falkner is now working in the U S.A. at the National Institutes of Health.

Parallel Studies in Other Countries. Liaison now exists, through the Centre International de l'Enfance, as mentioned at the top of page 2, with longitudinal growth studies in several other countries, and our London study, being the oldest, has the privilege of acting in some sense as a prototype or pilot study to the rest. Studies based in large part on methods similar to ours are now in progress in Paris, Zurich, Stockholm, Brussels and Louisville, while others whose approach has had to be orientated to the cultural conditions of Africa are taking place in Dakar (Senegal) and Kampala (Uganda). Periodical meetings of the teams concerned are held for purposes of discussion and alignment of approach. Dr. C B Hindley continues to act as psychological adviser to the joint studies, and Dr. Frank Falkner as general co-ordination Officer

Physical Methods. The medical and anthropometric examinations have continued on the same lines as before, with the addition of standardised photographs from which body measurements may be taken and Sheldon somatotype ratings can be made. We find it possible to photograph the majority of 2-year-olds in this way and virtually all children of 3 years and upwards. The calf radiographs mentioned in the 1954 article have had to be abandoned since we do not possess an X-ray machine of sufficient power to take films that can be measured by a standard technique. The subcutaneous tissue measurements are now taken with the Harpenden Skinfold Caliper. The standards for eye colour previously used have been found unsatisfactory and a new series of actual artificial eyes has been developed. All the anthropometric measurements have been recorded and scrutinized for measuring and recording errors, edited, and subsequently transferred to punched cards. Further data are punched on cards once every year.

Psychological Assessment From 3 Years Onwards. Following on the methods used in infancy (described on pp. 7/8), from the age of 3 years the child has been seen anually by one psychological worker while the mother is being interviewed by the other, the session lasting from $1\frac{1}{2}$ to 2 hours. Intelligence tests have been used at 3, 5, 8, 11, 14 and 17 years. At other ages tests of personality, attitudes, interests and values have been administered. From 12 years the subjects themselves have been interviewed, with emphasis during the addolescent years on life goals.

July, 1969.

A LONGITUDINAL RESEARCH IN CHILD DEVELOPMENT AND SOME OF ITS PROBLEMS

by

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Expression is not infrequently given to the need for studies of child development in which the growth of a number of individuals could be watched and recorded as it takes place, through the years of infancy and childhood to maturity.

Another need sometimes expressed is for an integration of knowledge on the physical, intellectual, and emotional aspects of personality through the collaboration of specialists in the relevant disciplines. The present research was initiated to meet these requirements.

Previously in this country studies have been made of children at particular ages or over certain periods of development, but it is recognised that many problems can be adequately investigated only by longitudinal methods. Furthermore, in this study account is taken of some of the many environmental factors affecting mental and physical development, and in particular of the influence of the changing family background. Several longitudinal studies are in progress in the United States (see Tanner, 1948), but this is the first study of its kind to be started in Britain, and differs from any of the American studies in various respects.

AIMS

The main aims may be summarized as follows:

General (a) To study some of the relationships between development and health, mental and physical.

(b) To use our data on normal children, for comparison with groups of abnormal children, in conjunction with other workers. We are at present recording the physical growth of children with special growth problems who are under the care of some members of the staff of the Hospital for Sick Children, Great Ormond Street, We are also in close touch with workers studying the development of mentally abnormal children.

/(c)

(* The Child Study Research Project was started in 1949 under the general direction of Professor Alan Moncrieff, Director of the Institute of Child Health, and Miss D.E.M.Gardner, University Reader in Child Development and Head of the Institute of Education Department of Child Development, with the assistance of an Academic Advisory Committee.)

(c) To compare the development of our sample of London children with that of children in other countries. This aim is facilitated by the fact that one of us (F.F.) is liaison officer for those growth studies sponsored by the Centre International de l'Enfance, Paris. Those in Paris and Zurich are successfully running at the present, while one is planned to start this year in Stockholm. These studies, on the physical side, will run exactly parallel to our study, on which they are founded. We have also had the benefit of personal contact, through a member of our Academic Advisory Committee, with several of the American centres which are working along similar lines, and with two studies in Africa primarily concerned with the effects of nutrition on growth, one of which is directed by Dr. R.F.A.Deane, of the Medical Research Council.

Psychological Development.

(a) At various age levels to assess, so far as is possible, the child's developmental level, including cognitive abilities and, more particularly, certain personality characteristics which have been the subject of less research than the foregoing.

(b) To study the effects on mental development of such factors as socio-economic level, overcrowding, family structure, parental methods of handling the child, and parental attitudes to it.

(c) To relate the personality development of children to their experiences.

(d) To throw some light on the extent to which later personality characteristics may be predicted from a knowledge of the child in earlier years.

Physical Development.

(a) To obtain growth curves of different bodily dimensions, showing rates of growth at different ages, and individual variations in patterns of growth.

(b) To classify the children according to body type, using the Sheldon method (Sheldon, 1940). This is designed to study the emergence of such body types, the extent to which they change, and to relate body type to growth and health.

(c) To study the correlation of physical growth with health, socio-economic factors, nutrition, and certain genetic influences.

MATERIAL

This consists of a small "pilot group" and a "main sample". In 1949 a pilot study was begun on 23 children. The mothers, a predominantly working-class sample, were contacted at the antenatal clinics in the same way as the main sample later.

MAIN SAMPLE

(a) Characteristics

The main sample consists of the children of those parents who, at the time of contact through the antenatal clinics, and at the date of birth, were resident in the postal area of London in which the centre is situated, and had no definite prospects of moving out of that area within six months after the birth of the baby; who were expecting babies in certain selected months; whose confinements were booked at one of seven hospitals or with one of three midwives' associations; and who were willing to co-operate in the study.

/Because

Because the most intensive study was to take place in the first year of life, it was necessary to spread the intake so as to maintain a manageable load Four groups of babies were recruited, each group covering births expected in a three-months period separated from the next group by an interval of six months, so that all months of the year were covered.

(b) Numbers and Losses

From the lists of mothers registered at the antenatal clinics serving the district 364 names were found that satisfied the sampling conditions. Of these, 92 were rejected as unsuitable on the following grounds: definite prospects of moving out of the district (59), miscarriages (13), still-births (4), mother died (1), mother deaf (1), mothers did not speak English (5), mothers could not be traced (7), unco-operative (2). No child was excluded from the sample after birth because of abnormality or for any other reason. In 50 cases (13.7%) the parents declined to participate in the study. Reasons given were: objections on principle (5), too many worries (15), not interested (6), "father disagrees" (15), no reason given (9).

It will be seen from Table I that 224 children were in the sample at birth and that 27 children have been lost from the sample since birth. Of these, 14 moved away out of reach, 11 parents withdrew co-operation, 1 died, and 1 was placed with foster parents, who were unwilling to participate. Withdrawal of co-operation seldom occurs after the first year, so that a limit can be predicted to the probable losses on this account; removals, however, can occur at any time, and will constitute a continuous source of loss.

TABLE I - ORIGINAL AND PRESENT SIZE OF SAMPLE

Group	Expected Delivery Dates	No. at Birth	No. at Present
A	November, December, 1951, January, 1952	44	30
B	August, September, October, 1952	57	51
C	May, June, July, 1953	61	54
D	February, March, April, 1954	62 *	62 *
	Total	224	197

* Co-operation promised, births not yet complete.

(c) Factors Affecting Co-operation

It is our experience that most parents are glad to co-operate once the purposes of the research have been fully explained to them. Their attitudes on this matter are interesting. We have found it profitable to stress the following points:

Non-interference with parents' methods of bringing up their children. This is particularly appreciated by those people who feel that with the increasing scope of public services "you can't call your child your own".

/Non-experimentation

Non-experimentation - There is a real and fairly widespread fear that research involves using children as "guinea-pigs" for some vaguely sinister end. This can usually be set at rest by a full explanation of the procedure and its main objects.

Contact with the Hospital for Sick Children - Although it is stressed that no advice or treatment can be given at the Centre, many parents welcome the prospect of a regular medical examination of the child distinct from that to be had at the welfare clinic. The specialist in the background is very reassuring to this type of parent.

An appointment system involving a separate reserved time for each child, a pre-paid card for mother's confirmation of the appointment, and an absolute minimum of waiting. This feature is welcomed enthusiastically by all parents, and agreement is readily secured to the spending of up to two hours at the centre (at not too frequent intervals) when it is realised that the time will be used and not wasted.

Personal photographs, taken of the child on each visit to the centre and presented to the mother on the subsequent visit, act as a strong incentive with some mothers.

Other factors carrying some weight, but usually less than those mentioned above, include the confidential nature of the records, the fact that little personal information concerning the parents is required, emphasis on the study of healthy normal children, length of time that the study including the pilot work has proceeded, its ultimate value to parents and others, and the sheer interest of watching the children develop and of taking part in a scheme of this kind.

Considerable effort is being made to encourage continued co-operation. Missed appointments are followed up by a psychological worker.

When families move within the greater London area they are not necessarily lost, since they are asked to continue their visits to the centre, expenses being met, and in some cases mothers have agreed quite readily to do this.

(d) Representativeness of the Sample

The sample is expected to be fairly representative of the population of the area, and probably of other large city populations, since (i) the only mothers who do not register at the antenatal clinics are the very small percentage who use private nursing-homes; (ii) the hospitals and midwives' associations co-operating account for probably more than 95% of the eligible children; (iii) the district itself is very mixed from the point of view of housing conditions and socio-economic level, containing some very old and dilapidated houses, some in better condition, some flats of medium age, and some newly erected blocks. Private gardens are almost unknown in the area, but there are a number of green squares and a large public playground. Occupations of fathers, which are given in Table II, embrace all five classes of the Registrar-General's classification. The great majority of the children are of British parentage, with some Irish, there are a few other nationalities, and a sprinkling are children of mixed marriages.

/It

It is hoped at a later stage to compare the non-co-operators with the co-operators on a number of variables. This should help us to estimate the extent of bias in the sample. It will also be possible to compare our sample with the general population, at least so far as the Registrar-General's classification is concerned.

TABLE II - Occupation of Fathers (as analysed to date) According to the Registrar-General's (1951) Classification of Social Class.

Class	Description	No.	%
I	Professional, etc., occupations	4	2.5
II	Intermediate occupations	24	15.3
III	Skilled occupations	89	56.7
IV	Partly skilled occupations	24	15.3
V	Unskilled occupations	16	10.2
	Total	157	100

PROCEDURE AND METHODS: PILOT STUDY

The 23 children were visited by the psychologist at frequent intervals during the first year, and were given psychological tests and physical examinations by the research staff at welfare clinic - premises. After the first year they were interviewed less frequently, but 18 of them are still seen anually at the centre for physical examination, including somatotyping, for photography, and on occasion for the trying out of techniques such as problem-solving tests, observational play sessions, projective testing, or a new physical measurement. Fourteen of them have at various times received into their homes advanced students of the Institute of Education, who assist the research team by making detailed studies of three or four families over a six-months period. Thus they have become a source of material for intensive observation, which is an integral part of the research programme. It is planned to follow up this group parallel with the larger sample, both because the very detailed case studies may prove to have value in the light of the children's later development, and because the experience gained with them at each age level is of great use in planning the wider study.

PROCEDURE AND METHODS: MAIN SAMPLE

TABLE III - PROCEDURE

Mother 6 to 7 months pregnant	Home visit for recruitment purposes
Mother 8 months pregnant	Interview with both parents at home.
Delivery and puerperium	Information supplied by hospitals or midwife
8 days (± 2 days)	Interview of mother by psychological worker.
4 weeks (± 2 days)	Physical examination and photograph of child.
6 weeks (± 4 days)	Interview at home by psychological worker.
3, 6, 9, 12, 18 months (± 7 days) and 24 months (± 14 days) and anually thereafter.	Physical examination, photograph, psychological observations on child at centre, and interview with mother.

A. The Early Weeks

Recruitment Interview - The recruitment visit is made without appointment and is kept free and informal. Its objects are to inform the mother of the general purpose of the study, and what it involves for her; to ascertain whether the parents expect to remain in the district; to obtain consent to a second visit, when further discussion will take place with the father present, and to ascertain when he is likely to be at home for this purpose.

Antenatal Interview - This is done by the psychologist who will continue to be responsible for maintaining contact with the case in question. Cases are divided equally between the two research psychologists. It is arranged at a time (usually the evening) when both parents are at home and free for a discussion lasting from half to one hour. The tone of the interview is kept quite informal although certain topics are routinely covered. The objects are to explain the purposes and procedure of the study in detail, answering any queries, and enlisting the co-operation of father and mother. The questions asked at this interview include details of living accommodation and number of persons in the home, present and past occupations of both parents, their nationality, age, education, mother's prior experience of children, the names and ages of any siblings and, if the child's grandparents are alive, how often they see the family. These questions are kept as brief as possible, and certain important information such as income is dispensed with lest enquiries should prejudice co-operation. A more general discussion follows, concerning how the parents feel about the prospect of the coming child, and its implications for them.

Information Obtained from Hospital or Midwife - It is recognized that considerable influences upon growth may occur antenatally, obstetrically, and post-natally from a physical point of view. Comprehensive notes are made of these three periods from the notes available - from hospital, clinic, doctor, or midwife - to obtain a general overall picture with special reference to pathological processes detected in the mother or baby. On the psychological side the midwife reports on the mother's reaction to labour and the ward sister or visiting nurse supplies details of the establishment of breast-feeding and the mutual adjustment of mother and child in the early days.

Lying-in Interview - this interview with the mother, done by the psychologist concerned, or psychological assistant, at eight days, lasts only about 15 to 20 minutes. Its objects are to obtain details of the feeding situation as the mother observes it, to confirm rapport, and to explore her attitudes to certain aspects of child care.

Four-weeks Physical Examination - On this their first visit to the centre, the mother and baby are fetched and returned home by the research medical officer in his car. The visit lasts 25 to 35 minutes and a certain routine is followed, which is repeated at each subsequent visit. It differs from later visits in two respects: the baby is seen only by the physical side of the research time, and a detailed history is taken from the mother. This is particularly concerned with: (a) the health of the mother during this and past pregnancies; (b) her obstetrical histroy; (c) leading questions on illnesses, diet, medicines taken, etc. during the pregnancy; (d) the family history; and (e) the health of the baby since birth, with an account of the feeding. The routine physical investigations are described later.

/Six

Six-weeks Home Visit - This visit, which is made by the psychologist concerned, or the assistant, consists of an interview with the mother lasting 30 to 40 minutes along the lines indicated below. Particular attention is paid to the adjustment of mother and baby to each other in the early weeks.

Sessions at the Centre

At 3, 6, 9, 12, 18 and 24 months, and annually thereafter, the mother brings the child to the centre for a session lasting from one and a quarter to two and a quarter hours. Both are seen first by the psychologist, who conducts an interview with the mother and makes observations on the child, and, secondly, by the paediatrician, who photographs the child, interviews the mother regarding its health, and conducts a physical examination.

(a) Psychological Session - During the course of the interview, observations and/or testing of the child are worked in at a convenient time. The situation varies from age to age but is standardized (within the practical limits implied by that word) for all children at a given age. An exception to this occurs when the first analysis of the data on one group reveals a weakness in the procedure, which is then rectified for subsequent groups. This applies both to interview questions and to observations of the child.

The Interview - This is carried out at every session. It opens with a few general questions, such as "How is baby?" "Any difficulties?" "How are you managing?" - designed to allow the mother to ventilate any matters that are on her mind. There follow a number of questions the details of which vary from one age to another, covering feeding, sleep, elimination, habits, activities, speech, social behaviour, and emotional characteristics. Under all these headings questions are asked both about parental methods and about the child's behaviour. The inquiry is not confined to a search for difficulties, since exactly similar information is required by way of control on those children who seldom show any problems.

Developmental Tests - At 6 months and 18 months, and with certain groups at other ages, the Griffiths mental development scale is used (Griffiths, 1954). This is a new scale of baby tests and inquiries regarding development, standardized on British children and used by courtesy of the author in advance of publication. It yields a quotient analogues to the development quotient employed by Charlotte Buhler (Buhler and Hetzer, 1935) and includes complete subscales for assessing locomotion, personal-social development, hearing and speech, eye-hand co-ordination and performance. For our purposes, besides providing a yardstick of the children's mental development, it provides a variety of situations in which to observe their behaviour, including tasks requiring concentration and effort, physical activity, and co-operation.

Standard Situations - at 9 and 1' months a series of standard situations are employed to reveal the baby's responses to a (comparatively strange) examiner, his dependence on his mother, his self-sufficiency when placed in a play-pen with some toys, and his reactions when unable to reach a toy. At 2 years the only test employed is taken from the Griffiths speech scale, and consists of naming or identifying pictures and small toys. Throughout the two-year interview, however, which commonly takes one and a half hours, the child is allowed to play in the interviewing room with certain standard play apparatus Note is taken of his main forms of play, of the length of time he plays without seeking attention, of the manner in which he seeks it, and of his utterances.

/Rating

Rating Scales - The child's behaviour during the interview, test and/or standard situations is used as a basis for rating a number of personality variables, selected on the basis of experience in the pilot study. This permits the comparison of one child, or group of children, with others of the same age in a roughly quantitative fashion. The repeated ratings will also be of value in estimating the constancy or otherwise of particular personality traits, and the extent to which personality patterns are affected by the family background and general environment. Seven of the variables are also rated during the physical examination by the assistant, who also notes the frequency of the child's smiling and crying. This permits of a comparison of the behaviour of the same child in two very different types of situation. For each variable, five categories are defined as concretely as possible so as to maximize approximation to a common standard on the part of several raters.

Check Lists - These consist of a list of characteristics of the child and factors in the life of the family which may occasion the mother pleasure, anxiety or displeasure. Any such feelings clearly demonstrated by the mother are noted on the list after each interview. It is thus possible on the basis of repeated interviews to pick out her consistent and changing preoccupations. An identical list is filled in by the assistant, who is present at all the physical examinations, where particular anxieties about the health and welfare of the child may be expressed.

(b) Physical Session - The Duration of this is from 25 to 35 minutes, and includes a number of aspects.

(i) A personal photograph is taken of the mother and child. An enlarged copy of this is given to the mother at her next visit.

(ii) A history is taken of the child's health since the last visit including feeding and appetite details, together with a note of injuries and inoculations. Should the child have been admitted to hospital, details are requested from the hospital concerned.

(iii) A comprehensive clinical examination is carried out by the paediatrician (usually the same one). Results are recorded on a detailed form so that personal bias and interest for one body-system over another is unlikely to affect the result should another paediatrician carry out the examination.

(iv) The child is measured anthropometrically by one of two practised measurers. It is hoped that to keep errors at a minimum the number of different anthropometrists over the years will be very small. So far four trained persons have been involved. To check on the extent of such errors, reliability tests are carried out from time to time. The routine measurements themselves number 13. These are height (or lying height) sitting height (or occiput-coccyx length) weight, hip width, biacromial width in older children, two measures between rigid bony points, two circumferences of limbs, and four subcutaneous tissue measurements. These measurements are designed to show the growth of the body as a whole, the general body type and the growth of muscle, fat and bone proportionately.

(v) A radiograph of the left wrist is taken and the skeletal age estimated from an atlas of standards (Greulich and Pyle, 1950).

(vi) A special radiograph is taken of the calf. From this may be calculated mathematically the tissue proportions of the limb - that is muscle, fat and bone (Falkner and Wisdom, 1952).

(vii) Colour of hair and eye are assessed by comparison with standards. Actual specimens of hair are obtained from the older children for the Department of Anthropology, University College, London, who are making a detailed study of this factor, using an accurate spectroscopic technique.

/(viii)

(viii) Future methods - Placing an individual in certain categories of body type is known as somatotyping. This is a photographic method of body measurement which determines body type by ascertaining the degree of endomorphy, mesomorphy and ectomorphy present (Sheldon, 1940). Accurate posing of a co-operative individual in three standard standing positions is needed and naturally this is not possible with infants and younger children. Work is in progress to try to devise a method of placing these groups into some form of body-type classification. This is being attempted by research into methods of finding the volume and surface area of these children by stereophotographic and physical means As a part of this research routine measurements of the volumes of hands and feet are carried out on all children in the sample.

Somatotyping itself is in progress on a small longitudinal growth study of volunteer healthy pre-adolescent and adolescent boys from the City of London School, and on the pilot group. The children from the main sample will be somatotyped at an age when they are co-operative enough.

SOME PROBLEMS OF INVESTIGATING PHYSICAL GROWTH

The nutritional status of a child can be assessed in three major ways. We are employing (a) the history, which may reveal extremes of nutritional background, coupled with a paediatric clinical assessment, and (b) an assessment derived from the socio-economic background. The third method, that of recording the food intake and its calorie value, has immense practical difficulties. More questioning of the mother fails to ascertain amounts of food, or the effects of cooking, while completion of diet charts by the mother is likely to influence her choice of foods.

Genetic influences are also of cardinal importance. It would be ideal to somatotype the parents, but it might well be impossible to obtain the consent of a representative sample to this proposal. It is planned, however, to measure the parents and any mature siblings at a later date, when the families are better known

Physiology - For practical reasons we are not able to carry out detailed physiological or endocrine-function investigations, the main difficulties being lack of personnel and laboratory facilities, and the obvious likelihood of parental objection to the taking of specimens from the children.

Interpretation of Physical Data - It is recognized that the measuring of "abnormal" and "normal" with regard to physical growth is an unsettled problem and difficult indeed to define. Together with others engaged on this type of work we are attempting to simplify this problem by continuing the search for a satisfactory basis on which to record and interpret our data

SOME PROBLEMS OF INVESTIGATING PERSONALITY DEVELOPMENT

The first problem on the psychological side of the research was to decide on the scope of the inquiry. Which of the many facets of personality should we study, and which of the environmental influences upon it?

/"Mental

"Mental development" is often taken to imply the complex of growth processes measured by the developmental tests of Gesell (Gesell and Amatruda, 1947), Buhler (Buhler and Hetzer, 1935), and others, centring on the maturation of various skills and having, therefore, a strong cognitive bias. Since this aspect of development has already been studied in considerable detail in many other places (see Maurer, 1946 pp. 13-18 for list of references) it was decided to concentrate rather on the orectic side of personality - the emotional characteristics, social behaviour and personal relationships, which differentiate children in another dimension, though they, too, are subject to developmental principles. Developmental tests are used in this research as a yardstick of general maturity, viewed as one important dimension of the child's individuality at a given age, to be related to other, less well charted, dimensions.

For example, the development of such skills as locomotion, speech and manipulative abilities depends to an important extend on such personality characteristics as strength of drive and attitude. It also depends on opportunities for learning. Both opportunity for learning and personality development are partly determined by the relationship the child makes with his parents and siblings in a particular social context. The development of skills in its turn modifies the child's environment, bringing fresh activities within his reach, and calling out new responses from those around him. In the same way, a child's responses to feeding, toileting, and going to bed can be seen, on the one hand, as a product of his maturity, health, temperament, and earlier experiences, and, on the other hand, as a condition of his subsequent health and personal adjustment, affecting his relationships with his parents in important ways.

In order to study the interconnexions between these factors, for most of which no standard method of assessment exists, we have had to forge our own research tools. In designing the interviews and observational techniques described in the foregoing sections we have sought to include as many as possible of those aspects of experience and behaviour which are easily observed, fairly objectively described, and generally thought to be of importance for later personality. In this process of selecting the questions to be asked, two of us, the research psychologists, have drawn extensively on the literature of developmental psychology, psycho-analysis, and learning theory; on our personal experience as fathers; and on the experience gained in the pilot study. As the children attain each fresh stage of development the search for hypotheses linking that stage with later life is taken up anew, and fresh interviews and situations are designed to investigate them.

Owing to the great number of variables involved in human behaviour, the testing of hypotheses in psychology often presents a complicated problem. In this research the experimental control of variables was renounced in line with the policy of non-interference. This leaves us with two possible ways of testing a hypothesis: (a) the statistical study of groups, and (b) the intensive study of individuals. By the former approach we can establish the mathematical probabilities of a connexion between variables, but the dynamics of the connexion tend to remain obscure. By the case-study approach we can gain added insight into the dynamic processes at work, and can see the operation of many factors in their context, but can never generalize beyond the one case, since the pattern of variables is never reduplicated.

Suppose, for example, that 60 out of 100 children who were frequently spanked were found to be spiteful to younger siblings or pets, whereas only 20 out of 100 unspanked children showed spite, we might safely infer a significant connexion. But in how many cases did spanking lead to spite, and in how many vice versa? Why were the 20 unspanked children spiteful and why not the remaining 40 of these spanked? More light on these questions can be gained by examining the individual case records, and more still if there is an opportunity to watch a few of the children in the actual situation. Even then the answers will be partial and

/qualified

qualified; but they will be in terms of the concrete actions of real children. Moreover, in the process, other hypotheses may well have been thrown up for further statistical investigation.

Our programme therefore envisages intensive observation of a limited number of individual children, running concurrently with the larger smaple study in a complementary relationship, each continually feeding the other with new ideas. To what extent this will prove feasible depends on funds available.

Of course the methods appropriate to the two types of approach differ in many important respects. It was not fully realized at the outset of this research that the two main functions of the pilot study were to some extent incompatible. On the one hand it had to be used for clarifying basic concepts, and for suggesting hypotheses to be tested on the larger sample, for this purpose it had to be an intensive study of a few individual children in their family settings - as vivid, concrete and personal as possible. On the other hand, it was intended for use in trying out the methods to be employed on the larger investigation, but here, although much was learnt about techniques of interviewing, testing, rating, etc., there was much more that could be discovered only through the actual experience of a large sample study.

In general, whereas freer methods are appropriate to the individual case, a more standardized approach is essential for larger numbers. In interviewing mothers, for example, it was desirable, for exploratory purposes, to allow them to talk spontaneously, with few set questions, provided only that the main headings were covered. For statistical purposes, however, it was quite essential that exactly comparable information should be obtained on each child so far as was possible, and this necessitated an oral questionary at each age, which, it was found, had to be constantly amended in the direction of greater exactness to ensure that different interviewers would obtain equivalent information. Again, in the pilot study, relatively free play situations were used in order to explore the variety of children's play and social behaviour at each age With the larger numbers, however, any neglect to standardize the situation (within practicable limits) would have led to spurious comparisons between children and to faulty conclusions In short, the more children one studies, man-power being constant, the less frequently one can see them The less frequently one sees them, the fewer the chances of correcting errors in the data, and the more important it becomes to ensure that one's methods have maximum reliability.

Since much of our information must necessarily be derived from mothers' testimony, and since the behaviour of children is notoriously variable, it is of particular importance to estimate the amount of error involved in our methods. Attempts are therefore being made to assess the accuracy of mothers' testimony, and the consistency of our observational techniques. This will be the subject of a later report.

The study has had the great advantage of specialized advice, encouragement, and much help since its conception from many people. From among these we are particularly grateful to the following:- Dr. Mildred Creak, consultant psychiatrist, the Hospital for Sick Children, Great Ormond Street; Dr. D. Geffen, medical officer of health, St. Pancras, Dr. Ruth Griffiths, educational psychologist; Dr T H Hills, director of radiology, Guy's Hospital, Professor R. A. McCance, professor of experimental medicine, University of Cambridge, Dr. F. A Miskin, director of civil engineering, University College; Dr. J A. Fraser Roberts, The London School of Tropical Medicine and Hygiene, Dr A. B. Stewart, late Divisional Medical Officer, the London County Council, Dr. J. M. Tanner, the Sherrington School of Physiology, St. Thomas's Hospital, Professor P. E. Vernon, Professor of Psychology,

/London

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The attached typescript is a copy of the final corrected draft of an article that subsequently appeared in the British Medical Journal No. 4897, November, 13, 1954.

Interview with Mother M 52a (Co)

Name _____ Date _____ Date due _____ 12 10

		Not done	0
		Early 1w+	1
		2w+	2
		4w+	3
		Late 1w+	4
		2w+	5
		4w+	6
		2m+	7
		4m+	8
		To time	9

No. (_ _ _) 1-3 Class (_) 7

Age (_ _) 4-5 Investigator (_ _) 8-9

Revision ( ) 6

Group A 4
B 5
C 6
D 7

Sex: female 8
male 9

Card Type (0) 11

1. (a) How is child? (Now) 12 12

N.W. 0
F.W. 1
V.W. 2
D.W. 3

(b) Since last visit? 12 13*

chronic/recurrent ailment	11
no illness	0
mild illness	1
definitely ill up to 2w	2
definitely ill more	3

Details Colds ___ coughs ___ skin troubles ___ constipation ___ diarrhoea ___

ear trouble ___ tonsillitis ___ Other ___ _____

_____

_____

_____

2. Any serious accidents or frights?

Age	Details	Treatment	Immediate disturbance	Sequelae (How long?)

(a) Frequency 12 14*

nil	0
1 fright only	5
1 accident only	6
several frights only	7
several accidents only	8
both	9

(b) Biggest disturbance 12 15*

no acc./frights (No ch.)	
nil	0
no information	2
mild: 1-10 mins	3
11-30 mins	4
more	5
marked: 1-10 mins	6
11-30 mins	7
31-120 mins	8
more	9

(c) Sequelae (most marked) 12 16

no acc./frights (No ch.)	
nil	0
mild: up to 1w	2
up to 1m	3
up to 3m	4
more	5
marked: up to 1w	6
up to 1m	7
up to 3m	8
more	9

No. _____ Age. _____ M 52b (Co)

3. Any operations, lancing, dental treatment, circumcision, etc.?

Any injections, vaccinations, or innoculations?

Age	What (details)	Immediate disturbance	Sequelae, Fear of Drs. etc. (How long?)

(a) Kind: 12 17 (b) Biggest disturbance: 12 18 (c) Sequelae (most marked) 12 19

(a) Kind		(b) Biggest disturbance (No ch.)		(c) Sequelae (most marked) (No ch.)	
nil	0	nil	0	nil	0
other	1	no information	2	other	1
vaccination	2	mild: 1-10 mins	3	mild fear: clinic etc.	4
innoculation	3	11-30 mins	4	Drs/nurses	5
injection	4	more	5	both	6
lancing	5	marked: 1-10 mins	6	marked fear clinic etc.	7
circumcision	6	11-30 mins	7	Drs/nurses	8
tooth extract / drilling	7	31-120 mins	8	both	9
operation	8	more	9		
various	9				

4. Separation. Has he been away from any member of family, or any one away from him? (3 days or more).

What age	For how long (days)	From whom	With whom	Where	Why	Remarks (Whether visited etc.)

Total time away:

Hosp./res. Nurs. 12 20		Elsewhere from M (+ others) 12 21		Elsewhere from other(s) 12 22	
nil	0		0		0
1-2d	1		1		1
3-7d	2		2		2
8-14d	3		3		3
15-30d	4		4		4
31-89d	5		5		5
90+	6		6		6

No. ____ Age: ____ M 52c (Co)

5 (a) During separation 12 23*

no separation (No ch.)
no information 0
happier 4
same 5
some disturb. less 6
some disturb. 7 d+ 7
def. unhappy less 8
def. unhappy 7 d+ 9
(Punch severest disturbance)

(b) On return Immediate response. Greeted joyfully ___ with reserve ___

non-recognition ___ crying ___ active hostility ___ nil special ___ _____

(c) Delayed response (same day) Crying ___ tantrum ___ clinging ___ withdrawal ___

wants extra attention ___ nil special ___

(d) Sequelae (how long) 12 24*

no separation (no check)
nil special 0
other change 5
improvement 6
some disturbance 1-7 d 7
some disturbance 8-28 d 8
some disturbance more 9
(Punch biggest disturbance)

6 (a) Has the family been away together? (c) Any disturbance in C's behaviour?

Duration 12 25
nil 0
3 days or less 1
4-10 days 2
11-17 days 3
18-24 days 4
25-32 days 5
more 6

Feeding___ sleeping___ elimination___

toileting___ other (sp)___ _____

Effects: 12 26
no holiday (no ch.)
no disturb. 0
disturb. s'times mild 4
:variable 5
:marked 6
disturb. always:mild 7
:variable 8
:marked 9

(b) Seaside ___

country ___

town ____

(d) Has C. been on holiday other times? (e) M's remarks: C enjoyed___less trouble___

All holidays
Total duration 12 27
nil 0
3 days or less 1
4-10 days 2
11-17 days 3
18-24 days 4
25-32 days 5
more 6

No. _____ Age: _____ M 52d (Co)

7. Have you had any visitors staying in the past year? (1m to 6m.)
(Code in Q's 10 and 11)

Who	When	How long	Any effects	Any effects of departure

HOME BACKGROUND

8. Have there been any changes in the family since last year? Yes ___ No ___
(Enumerate: removals; people joining or leaving; expecting baby; serious illness; F or M changing work. sibs starting school.)

9. (a) Removal at _____ years. 12 28*

(b) What alteration to C's life? _____

(c) Effects on C. _____

no removal (no ch.)
removal no effect 0
C better 1
sl. disturb. 1-7d 4
8-30d 5
more 6
marked disturb. 1-7d 7
8-30d 8
more 9
(If 2 removals, punch most marked disturbance)

10. (a) Has anyone now lived with the family for 6m. or more? (include birth of sibs)

Who? _____ from ____ to _____ 12 29*

(b) What alteration to C's life? _____

(c) Effects on C. _____

no additions (no ch.)
temp. visitors: disturb. nil 1
sl. 2
marked 3
other: disturb. nil 4
sl. 5
marked 6
baby. disturb. nil 7
sl. 8
marked 9

11. (a) Has anyone left the family? Who? _____ 12 30*

Why? _____ When? _____

(b) What alteration to C's life? _____

(c) Effects on C. _____

no departures (no ch.)
temp. visitors
disturb. nil 1
sl. 2
marked 3
other: disturb. nil 4
sl. 5
marked 6
sib: disturb. nil 7
sl. 8
marked 9

12 (a) Has anyone in the family been seriously ill, or anyone who enters into C's life? 12 31 *

Who? _____ from _____ to _____

_____

_____

_____

_____

(Death of: _____ at ___ yrs. from _____)

no illness/death (no ch.)
serious illness:
(of other) disturb. nil 1
sl. 2
marked 3
serious illness.
(immed. family)
disturb. nil 4
sl. 5
marked 6
death: disturbance nil 7
sl. 8
marked 9

(b) What alteration to C's life? _____

_____

_____

(c) Effects on C. _____

_____

_____

_____

13. Mother works as _____ Hours: from ____ to ____ 12 32 *

_____

Started _____ yrs. stopped _____ yrs.

_____

At home ____ other ____ _____ Days/week ____ _____

_____

no change (no ch.)
other change 6
temp. worked 7
stopped work 8
started work 9

14 (a) Has F. been in the same work in past year? 12 33 *

Stopped at _____ yrs. started _____ yrs.

Unemployed _____ w.

(b) Job(s). _____

_____

_____

(c) Financial effects: _____

(d) Alteration to C's life? _____

_____

(c) Effects on C. _____

_____

_____

no change (no ch.) -
changes, variable effects 2
change(s), more money 3
same " 4
less " 5
unemployed up to 1m 6
up to 2m 7
up to 3m 8
more 9
(Mark whichever apply)

effects of change 12 34
no change (no ch.)
effects on C.
nil special 6
good 7
disturbance sl. 8
marked 9

No. ____ Age: ____ M 52f (Co)

12 35 ✳

15 (a) Older sibs. started school in past year? _____ no (no ch,)
yes, effects:
nil special 6
good 7
sl. disturb. 8
marked disturb. 9

At ____yrs. _____

(b) Effects on C. _____

_____

16. Have there been any other changes in your lives, such as (naturalization), attending evening classes, getting any diplomas, or domestic help?

_____

17. Has C. been looked after regularly by other people, or attended nursery, school, or play groups etc.?

12 36 ✳

(a) By whom? _____ start/change sch/ N.S. etc. 11

(b) Where _____ never (no ch.)
less: home 0
other..... 1
1/w. home 2
other..... 3
sev/w: home 4
other. ... 5
daily: home 6
other... . 7
(sp.) nursery/N.S. 8
school 9

_____

(c) Started. _____

(d) Stopped. _____

(e) Hours _____

(f) Reason: _____

_____

18 (a) Is C. unhappy when you leave him? (past 4w , or 4w.prior to school holidays)

12 37

never left (no ch.)
not with:..... 1
all others 2
school/nursery 3
variable with..... 4
all others 5
school/nursery 6
yes with:..... 7
all others 8
school/nursery 9

Overall 12 38 ✳
never left (no ch.)
always asleep 0
unhappy. N 1
R 2
S 3
U 4

_____

_____

18 (b) If regular: any effects.

_____

_____

_____

_____

_____

_____

_____

(c) If started/changed in past year:

12 39 ✳

no started (no ch.)
several occasions 11
no disturbance 1
mild disturbance
up to 1w 2
up to 1m 3
up to 2m 4
more 5
marked disturbance
up to 1w 6
up to 1m 7
up to 2m 8
more 9

(Punch most marked disturbance)

No. _____ Age. _____ M 52g (Co)

19. Does he ever make a fuss about going to school? (past 4 w)

12 40

(Not applic. no ch.)
never s.l.v. 0
yes s.l.v., N. now 1
R 2
S 3
U 4

20(a) Does he stay for school dinner?

12 41

(not applic. no ch.)
never s.l.v. 0
yes s.l.v., N. now 1
R 2
S 3
U 4

(b) How did he take to it?

12 42

(not applic. no ch.)
no disturbance 0
mild disturbance, up to 1w 1
up to 1m 2
up to 2m 3
more 4
marked disturb., up to 1w 5
up to 1m 6
up to 2m 7
more 8
refusal, sch. dinner abandoned 9

(c) Does he like it now?

12 43

(not applic. no ch.)
marked dpl. 5
some dpl. 6
variable/doubtful 7
likes on the whole 8
definitely likes 9

(d) Made any differences at home? (eating/manners?)

12 44

(not applic. no ch.)
remarks: no change 0
better manners 1
worse manners 2
eats much worse/home 5
eats somewhat worse/home 6
variable/doubtful 7
eats somewhat better/home 8
eats much better/home 9

21. Name and address of school: _____

22. Name of Head: _____

23. Teachers: men or women?

12 45

(not applic. no ch.)
both 7
female 8
male 9

24.(a) Has there been any change of teacher s.l.v.?

12 46

no 0
M. "Don't know" 1
one change 7
2 or more known changes 8
no constant teacher, 1 term+ 9

(b) Effects on child?

12 47

(not applic. no ch.)
nil 0
improvement 1
mild disturb., up to 1w 2
up to 1m 3
up to 2m 4
more 5
marked disturb, up to 1w 6
up to 1m 7
up to 2m 8
more 9

No. _____ Age: _____ M 52h (Co)

25 (a) Has he often been absent? 12 48

Total time
- nil 0
- up to 1w 1
- up to 2w 2
- up to 1m 3
- up to 2m 4
- up to 3m 5
- up to 6m 6
- up to 9m 7
- whole school year 8

(b) Effects on return? 12 49*

(no absence no ch.)
- nil 0
- improvement 1
- mild disturbance, up to 1w 2
- up to 1m 3
- up to 2m 4
- more 5
- marked disturbance, up to 1w 6
- up to 1m 7
- up to 2m 8
- more 9

(punch severest disturbance)

(c) Any prolonged absences? From _____ to _____

_____

_____

_____

26. Are you always at home when he comes back, or is he looked after by someone else? 12 50

_____

_____

_____

_____

_____

_____

(not applic. no ch.)
- always alone 0
- often alone 1
- alone occ./doubtful:
  - else, with other child. 2
  - M. or older child. 3
  - M. or other adult 4
  - M. 5
- never alone. with older ch. 6
  - M. or older child. 7
  - M. or other adult 8
  - M. 9

N.B. CHILD MINDERS.

27. How have you been keeping, past year?

_____

_____

_____

_____

_____

_____

_____

(a) Now 12 51*
- N.W. 0
- F.W. 1
- V.W. 2
- S.V. 3

(b) S.I.v.: 12 52*
- no illness 0
- chronic/tiredness 1
- chron/recurt.ailment 2
- mild illness 3
- marked illness
  - up to 2w 4
  - up to 1m 5
  - more 6
- "nerves" at times 7
- chronic "nerves" 8
- chronic physical debility 9

28. Have you had any difficulties with him? (Note frequency and handling)

_____

_____

_____

_____

_____

_____

_____

12 53
- none of these 0
- other. 1
- speech 2
- backwardness 3
- misery 4
- sleeping 5
- feeding 6
- elimination 7
- toileting 8
- habits 9

12 54*
- none of these 0
- anger 1
- stubbornness 2
- self-will 3
- spiteful 4
- fears 5
- disobedience 6
- shyness 7
- showing off 8
- dependence 9

No. ___,__ Age _____ M 52a (C1)

E.B. Repeat columns 1 - 10

Card Type (1) 11

FEEDING

29 (a) How has he been taking his food s.l.v.?

Now 12 12
N.W. 0
F.W. 1
V.W. 2
E.W. 3

_____

_____

_____

_____

(b) Complaints (s.l.v.) 12 13 *

never satisfied	11
nil	0
other	1
distractible	2
poor appetite	3
faddy	4
won't finish	5
messy	6
too quickly	7
too slowly	8
battle of wills	9

30 (a) Has he lost his appetite at any period? Started_____m. recovered _____m.

12 14 *

nil		0
less		1
occasionally		2
ceased, lasted	8-30d	3
	31-90d	4
	more	5
still, lasting	8-30d	6
	31-90d	7
	more	8
	all year	9

(b) Course: _____

_____

(c) Methods tried: _____

_____

Current method: Same ___ or _____

_____

_____

_____

_____

31. Are there any foods he consistently refused s.l.v.?

(a) Number 12 15 ✳
11
Specify No. (__)
(9 = 9 or more)
("problem" = 11)

_____ _____

_____

_____

_____

(b) Type 12 16 ✳
puddings 11
nil (no ch.)
other..... 0
cereal 1
eggs 2
potatoes 3
greens 4
meat 5
fish 6
bread 7
fruit 8
milk 9

(c) Methods (Coax?) 12 17 ✳
no refusals (no ch.)
nil 0
other..... .. 1
give in other form 2
try later 3
coax (verb.encour.) 4
verbal insistence 5
omit food he likes 6
threatens punishment 7
physical force 8
punishes (how) 9
details _____
_____

If 4 or more refusals, or if "problem": Current method Same ___ or _____

(d) How and when started: _____

(e) Course: _____

32 (a) Use of bottle (if not stopped at 4 years). (b) Response to weaning from bottle.

12 18 ✳
nil 0
used s.l.v. not now 1 _____
used now: 1/d 2
2/d 3 _____
3/d 4
more 5 _____ _____

12 19
no weaning (no ch.)
easy 0
moderate 1
difficult 2

Started_____ stopped_____ _____

33. Does he ever like to be helped with his food? 12 20 ✳

_____ N 0
R 1
S 2
_____ U 3

34. Any other difficulty with feeding behaviour at meal time? 12 21

(a) How and when started: _____

_____

(b) Course _____

(c) Methods tried: _____

_____

nil 0
other..... 1
capriciousness 3
distractible 4
faddy 5
mossy 6
too quickly 7
too slowly 8
battle of wills 9

Current method. Same ___ or _____

SLEEP

35. (a) How has he been sleeping s.l.v.?

Now 12 22 ✳ _____
N.W. 0
F.W. 1 _____
V.F. 2
E.W. 3 _____

_____

_____

_____

_____

(b) Complaints s.l.v.

12 23 ✳
several of these 11
nil (no ch.)
other (sp.)..... 0
poor day sleeper 1
resists going to bed 2
restless 3
wakeful evenings 4
talks in sleep 5
wakeful (not crying) 6
wakeful with crying 7
bad dreams/night terrors (sp)..... 8
sleep walking 9

36. Hours (a) Day 12 24 (b) Night 12 25 (c) Total 12 26 (d) Regularity: 12 27

(a) Day		(b) Night		(c) Total		(d) Regularity	
nil	0	less (sp)	0		0	very irreg.	0
days/week less	1	8 hrs.	1		1	some variation	1
3-5	2	9 hrs.	2		2	very reg.	2
6-7	3	10 hrs.	3		3		
average. less	4	11 hrs.	4		4		
½ hr.	5	12 hrs.	5		5		
1 hr.	6	13 hrs.	6		6		
2 hrs.	7	14 hrs.	7		7		
3 hrs.	8	15 hrs.	8		8		
more	9	more (sp).	9		9		

(e.g. ¾ = 1 hr. 2½ = 3 hrs.) (e.g. 6½ = 7 hrs. 14½ = more)

37 What happens as a rule in last hour of C's day, leading up to bedtime? (Play, bathing, putting to bed etc. - with whom?)

38. Does he take anything to bed (sp.); or have rituals (things he really must do)?

(a) Always same: 12 28 (b) Cuddles or sucks: 12 29 (c) How and when stopped?

(a) Always same		(b) Cuddles or sucks	
other marked rituals	11	neither (no ch.)	
no	0	reg.finger sucking	11
diff. things R	1	cuddles never s.l.v.	0
S	2	yes s.l.v.,now: N	1
U	3	R	2
always same R	4	S	3
S	5	U	4
U	6	other sucking.	
		never s.l.v.	5
		yes s.l.v.,now: N	6
		R	7
		S	8
		U	9

Specify: _____

Course: _____

39 Have you had any trouble getting him off to bed, or off to sleep?

Resists preparation

(c) Now. 12 30 (b) S.l.v.: 12 31 Details: _____

(c) Now.		(b) S.l.v.:	
N	0	never	0
R	1	occasionally	1
S	2	periods less	2
U	3	periods 1-2m	3
		periods 2-6m	4
		more	5
		whole year	6

Demands attention in evening

(c) Now 12 32 (d) S.l.v.: 12 33 (c) How? 12 34 _____

(c) Now		(d) S.l.v.:		(c) How?	
N	0	never	0	never (no ch.)	
R	1	occasionally	1	other	0
S	2	periods less	2	coming out	7
U	3	periods 1-2m	3	calling	8
		periods 2-6m	4	crying	9
		more	5		
		whole year	6		

No. ____ Age: ____ M 521 (C1)

If problem of U or S:

(f) How and when started: _____

_____

_____

_____

(g) Course: _____

_____

Current method. Same ___ or _____

(h) Method tried: 12 35

no trouble (no ch.)	
other (sp).....	0
nurse	1
stay with C	2
bring in living roo	3
keep up till sleepy	4
toileting/drink(sp)	5
talk to C.	6
ignore	7
scold	8
smack	9

40. Has he been waking in night? (Since last visit)

	From	To	Remarks
More			
Nightly			
3 to 6/wk.			
1 or 2/wk.			
Less			
Never			

(a) Waking s.l.v.: never and less.12 36 1-2/w:12 37 3-6/w 12 38 nightly or more:12 39

total duration: nil (no ch.)	1	1	1	1
up to 1 w	1	1	1	1
2 w	2	2	2	2
1 m	3	3	3	3
2 m	4	4	4	4
3 m	5	5	5	5
6 m	6	6	6	6
9 m	7	7	7	7
between 9 & 12 m	8	8	8	8
12 m	9	9	9	9

If more than occasionally

(b) When wakes in night. 12 40

not applicable (no ch.)	
other (sp.).....	1
cheerful	3
for drink	4
for toilet	5
physical discomfort	6
just wants attention	7
upset	8
frightened	9

(c) If wakes, methods tried.12 41

no applicable (no ch.)	
other (sp.).....	0
drink	1
cover up/change	2
talk to C.	3
stay with C.	4
nursing	5
ignore	6
scold	7
punish	8
parents' bed	9

(d) Effective 50% or more 12 42

	0
	1
	2
	3
	4
	5
	6
	7
	8
	9

_____

_____

_____

_____

No. _____ Age. _____ M 52m (C1)

41 (a) Shares room with: 12 43 Shares bed with 12 44 _____

none	0		0
other (sp.).....	1	.....	1
one sib.	2		2
more sibs.	3		3
M.	4		4
F.	5		5
M + F	6		6
F + sibs.	7		7
M + sibs.	8		8
M + F + sibs.	9		9

(b) Does he ever sleep in your bed: 12 45

never	0
less	1
odd periods	2
1m or more. 1-2/w formerly	3
1-2/w still	4
sev/w formerly	5
sev/w still	6
nightly formerly	7
nightly still	8
always	9

Circumstances: 12 46

nil (no ch.)	
other (sp.).....	1
on holiday/visitors etc.	5
C. ill	6
F. away	7
at C's request	8
accepted practice	9

42 (a) Does he ever dream? 12 47

nil	0
less	1
1/m +	2
1/w +	3
almost nightly	4

(b) What does he say in his sleep? etc. 12 48

never dreams (no ch.)	
never bad	0
bad dreams: less	1
1m+	2
1w+	3
nightmares. less	4
1m+	5
1w+	6
night terrors: less	7
1m+	8
1w+	9

(b) _____

_____

_____

_____

_____

(c) Any dreams described: _____

_____

_____

(d) Course _____

_____

_____

43 (a) Any other sleeping problems. 12 49

nil	0
other (sp.).....	1
restless	8
sleep walking	9

(b) How and when started _____

_____

(c) Course _____

_____

_____

(d) Methods tried _____

ELIMINATION

54. Any difficulties with bowels or bladder s.l.v.? 12 50

nil	0
other (sp.).....	1
diarrhoea	3
constipation	4
bladder incontinence	5
refuses pot	6
bowel incontinence	7
retention of urine	8
retention of faeces	9

45. Has he been constipated s.l.v.? (b) Number of attacks 12 52 (c) How and when started

(a)

no	0
yes. infrequency (sp).....6	
hard stools	7
diff. in defaecation	8
pain on defaecation	9

(b)

never (no ch.)	
1 or 2	2
several times	3
monthly	4
more	5
chronic. 1m+	6
3m+	7
6m+	8
all year	9

(d) Methods tried 12 53

never constip. (no ch.)	
nil	0
dietary	1
laxative pl/neut.	2
laxative dpl.	3
suppository. pl.	4
neut.	5
dpl.	6
enema: pl.	7
neut.	8
dpl.	9
other (sp).....(punch 12)	

(e) Course. _____

(f) Improvement attributed to (if over 1 wk.):

46.(a) Is he 100% clean with his bowels? Proportion of motions caught now: 12 54

(b) Any accidents in past month?

Circs. (apart from when out) _____

nil	0
under 30%	1
30-70%	2
70-95%	3
95-100%	4
95-100% (when out only)	5
soils now (diarrhoea)normally 100%	6
100% now, soiling period s.l.v.	7
100% now, occ. s.l.v.	8
100% now, and s.l.v.	9

47. Previously (a) Dirtying since _____m. stopped _____m. Occ. ___ N. ___

(b) How started: _____

(c) Course. _____

48. Is C. dry? Now: (a) Day: (b) Night:

	12 55	12 56
never dry	0	0
rarely dry	4	4
sometimes dry	5	5
usually dry	6	6
practically always, wetting period s.l.v.	7	7
practically always, wetting occ. s.l.v.	8	8
practically always dry s.l.v.	9	9

No. ____ Age: ____ M 52o (C1)

49. S.L.V. wetting (a) Day since ____m. stopped _____m. Occ. ____ N. _____

Night since _____m. stopped _____m. Occ. ____ N. _____

(b) How started: _____

(c) Course. _____

50. C's response to lapses.

	(a) Soiling: 12 57	(b) Wetting 12 58
no lapses (no ch.)		
nil	0	0
other (sp).....	1	1
tells M.	2	2
blames others	3	3
clears up	4	4
hides mess	5	5
avoids adult	6	6
frightened	7	7
looks guilty	8	8
upset	9	9

51. Method of handling lapses.

_____

_____

_____

(c) Soiling, improvement attributed to

Same ___ or _____

_____

	(a) Soiling: 12 59	(b) Wetting 12 60
no lapses (no ch.)		
nil	0	0
other (sp).....	2	2
mild verbal disapproval	3	3
shames	4	4
threats (sp).....	5	5
make C. wipe up	6	6
other punishment	7	7
smacks	8	8
rub nose in it	9	9

(d) Wetting, improvement attributed to: Same ___ or _____

_____

52. (b) Lifted at night from_____y.to_____y. 12 61

never s.l.v.	0
only if wakes	5
wakened	
never,yes s.l.v.	6
rarely	7
sometimes	8
usually	9

53. Do you ever have to help him at the toilet? 12 62

_____

_____

no	0
other (sp).....	7
buttons	8
wiping bottom	9

54. Other elimination problems mentioned (sp.)_____

_____

(a) How and when started. _____

(b) Course: _____

12 63	
nil	0
other (sp).....	5
diarrhoea	6
reten. of urine	7
reten. of faeces	8
refuses pot	9

(c) Methods tried: _____

(d) Improvement attributed to: Same ___ or _____

No. _____ Age _____

55. HABITS Do you ever see him·- (enumerate)

	Past 4w/per day					S.L.V.			PREVIOUSLY		WHAT DONE							REMARKS
	Many	Sev.	1-2	L	N	Def. Hab.	Occ.	N	Started (m) and how	Stopped (m) and how (or course)	Smack U	Smack S	Smack R	Rep.	Rem.	Other (sp)	Nil	
Sucking fingers	8	7	6	5	4	3	2	0	12 20 *		9	8	7	6	5	1	0	12 12 *
Nail-biting	8	7	6	5	4	3	2	0	12 21 *		9	8	7	6	5	1	0	12 13 *
Suck, chew, bite, other (sp)	8	7	6	5	4	3	2	0	12 22		9	8	7	6	5	1	0	12 14
Picking/scratch. Where?	8	7	6	5	4	3	2	0	12 23 *		9	8	7	6	5	1	0	12 15 *
Nose-picking	8	7	6	5	4	3	2	0	12 24		9	8	7	6	5	1	0	12 16
Play with privates	8	7	6	5	4	3	2	0	12 25 *		9	8	7	6	5	1	0	12 17 *
Nervous movm. grim. blink, twitch, make faces etc. What?	8	7	6	5	4	3	2	0	12 26		9	8	7	6	5	1	0	12 18
Other+ (sp) 9 = 2 or more	8	7	6	5	4	3	2	0	12 27 *		9	8	7	6	5	1	0	12 19 *

+ Punch most frequent.

N.B. Repeat columns 1 - 10

M 52p (C2)

Card Type (2) 11

No.____ Age.____ 56. FEARS. Is he afraid of anything? (Enumerate)

Object of fear (enumerate)	SHOWN More	1/2	N	Stall	No p coop.	WHAT DONE U Force	U Tees	U reas sure	U comf	U Oth	Var	U Nil	Any Details	Started & How	Stopped & How of course	Remarks
Animals (sp.)	9	8	7	6	5	4	3	2	1	0	11		12 23 *			
Noises (sp.)	9	8	7	6	5	4	3	2	1	0	11		12 29 *			
Storms (sp)	9	8	7	6	5	4	3	2	1	0	11		12 30 *			
Dark	9	8	7	6	5	4	3	2	1	0	11		12 31 *			
Imag. creatures (e.g. bogeymen)	9	8	7	6	5	4	3	2	1	0	11		12 32 *			
In water	9	8	7	6	5	4	3	2	1	0	11		12 33 *			
Stories (sp.)	9	8	7	6	5	4	3	2	1	0	11		12 34			
Coloured people	9	8	7	6	5	4	3	2	1	0	11		12 35 *			
Blood	9	8	7	6	5	4	3	2	1	0	11		12 36 *			
Other (sp.) (punon severest)	9	8	7	6	5	4	3	2	1	0	11		12 37 *			
Anything on T.V.	9	8	7	6	5	4	3	2	1	0	11		12 53 *			
Cinema: seen	Reg.	Occ.	Nil	T.V. seen				Reg.	Occ.	Nil						
	9	8	7					2	1	0			12 57 *			

No. ____ Age; ___ M 52r(C2)

57. Total number of fears ("more") in the year. 9+ = 9. (__) 12 40
(sp. number if 9+ ___)

MAY

58 When he's playing, does he do any of these things?

	Dress up like woman 12 41	Dress up like man 12 42	(Suggestion?) Women's jobs 12 43	Men's jobs 12 44	Driving trains cars etc. 12 45	Looking after dolls 12 46	Fighting games, cowboys, rough and tumbling 12 47
No	0	0	0	0	0	0	0
Only on suggest.	1	1	1	1	1	1	1
Occ.	2	2	2	2	2	2	2
Yes	3	3	3	3	3	3	3
Remarks							

59. Any other make-believe games? (House, school, hospital etc..) 12 48

nil 0
little 8
many 9

No. ____ Age, ____ M 52s (C2)

60. Does he do any of these things either in summer or winter? (not at school)
If not, any opportunity?

	Sand earth	Dough Plastic-ine	Water (not bath)	Drawing	Paint-ing	Bricks: constr: toys	Ride wheel toys	Music	Dancing
	12 49	12 50	12 51	12 52	12 53	12 54	12 55	12 56	12 57
Little opp.	11	11	11	11	11	11	11	11	11
Nil	0	0	0	0	0	0	0	0	0
Occ.	7	7	7	7	7	7	7	7	7
Yes	8	8	8	8	8	8	8	8	8
Marked interest	9	9	9	9	9	9	9	9	9
Remarks									

Other Special Interests (Esp. creative artistic) 12 58

nil 0
other 1
creative artistic 9

No. ____ Age ____ M 52t (C3)

N.B. Repeat columns 1 - 10

Card Type (3) 11

61. Does ". play with him much? (Normally)

(a) Working days:

	12 12 ✳
nil	0
1 to 15 mins	1
16 to 30 mins	2
31 to 60 mins	3
61 to 120 mins	4
121 to 240 mins	5
more	6

(b) Free days:

	12 13✳
	0
	1
	2
	3
	4
	5
	6

(c) Average number of free days per week

	12 14✳
nil	0
less	1
½ day	2
1 day	3
1½ days	4
2 days	5
3 days	6
4 days	7
5 or 6 days	8
7 days	9

62. Does C. do any of these things with you, or F. (or anyone else)?

	With M.			With F.			With other (if M & F occ. or no)							REMARKS
	Yes	V.rarely/ doubtful	No	Yes	V.rarely/ doubtful	No	Yes	V.rarely/ doubtful	Woman	Man	Older ch	Younger ch.	Nil	
"Helping" (watching parent work)	9	8	0	9	8	0	9	8	7	6	5	4	0	
Romping	9	8	0	9	8	0	9	8	7	6	5	4	0	
Constructional play (making things)	9	8	0	9	8	0	9	8	7	6	5	4	0	
Pretending games	9	8	0	9	8	0	9	8	7	6	5	4	0	
Out for pleasure	9	8	0	9	8	0	9	8	7	6	5	4	0	
Ball games	9	8	0	9	8	0	9	8	7	6	5	4	0	
Stories	9	8	0	9	8	0	9	8	7	6	5	4	0	
Books	9	8	0	9	8	0	9	8	7	6	5	4	0	
Teaching 3 r's (excl. verbal repetition)	9	8	0	9	8	0	9	8	7	6	5	4	0	C. not interested"

62 (a) Is there anything else that you or your husband often do with him?

	Yes	Occ.	Nil	
	9	8	0	

No. ____ Ago: ____

M 52u (C3)

63. Is he very sensitive? (Easily hurt?)

(a) Circumstances (enumerate) _____

	12 43*
nil	0
other	1
feeling out of it	4
some one's luckier	5
teased/laughed at	6
criticised	7
others hurt	8
sad stories	9

(b) Overall

	12 44*
little opp.	11
not at all	0
not particularly	1
doubtful/variable	2
yes on the whole	3
yes, very sensitive	4

EMOTIONAL CHARACTERISTICS

64. (a) Does he often get into a tantrum: _____

	12 45*
never	0
very placid	2
mild temper only	3
less	4
1 or 2/week	5
sev./week	6
1 or 2/day	7
sev./day	8
many/day	9

(b) How shown? (Enumerate 4 only)

	12 46
none of these	0
enumerate: screams	2
enumerate: bites	3
enumerate: rigid	4
enumerate: thrashing limbs	5
shouts	6
blue in face	7
abuses M. or F.	8
other (sp).....	9

	12 47
none of these	0
lies on floor	1
stamps	2
slams doors	3
hits inanimate objects	4
hits people	5
pinches	6
scratches	7
throws things	8
hurts self	9

(c) What is done? (and anything else?)

	12 48*
never angry (no ch.)	
other	0
give own way	1
comfort	2
divert attention	3
ignore	4
laugh	5
reproach	6
other punishment (sp)	7
isolate	8
smack	9

If common, or problem:

(d) How and when started: _____

_____

(e) Course: _____

_____

(f) Improvement attributed to. Methods ___

or _____

_____

_____

_____

_____

_____

_____

_____

65. (a) Does he show jealousy? (Does he mind if you or your husband give attention to some one else, or if others do?) 12 49*

never 0
occasionally 1
prevailing att. 2

(b) "Rival" (and anyone else?)

Children 12 50*

no child rival (no ch.)
other children 11
special older sib. 0
special older sib + others 1
all older sibs. 2
all older sibs.+ others 3
special younger sib. 4
special younger sib.+ others 5
all younger sibs. 6
all younger sibs.+ others 7
all sibs. 8
all sibs. + others 9
(punch most general category)

Adults 12 51

no adult rival (no ch.)
other 0
F. 4
M. 5
F. + other 6
M. + other 7
M. + F. 8
M. + F. + other 9

Specify rivals S's _____ _____ Other ch. _____ Other adults _____

(c) Love object. (Enumerate M, F, other) _____ 12 52*

no jealousy
other (sp)..... 3
F. 4
M. 5
F. + other. 6
M. + other..... 7
M. + F. 8
M. + F. + other 9

(d) Cires.. _____

(e) How shown? 12 53*

no jealousy (no ch.)
other (sp.)... 0
demandingness to love object 1
"baby ways" (sp)..... .. 2
angry cry 3
hurt cry 4
hostility to other(things/people) 5
to rival 6
to love object 7
exaggerated affection to rival 8
withdrawal from love object 9

(f) Methods tried (relate to (e) items by reference nos. if necessary). 12 54*

no jealousy (no ch.)
other (sp)..... 0
try to avoid situations 1
give affection 2
distract 3
rational appeal 4
sentimental appeal 5
laugh 6
ignore 7
reproach 8
punish (sp)..... .. 9

(g) How and when started. _____

(h) Course. _____

66. (a) Is he ever spiteful? (Real intention to hurt) 12 55*

never 0
only when provoked 1
spontaneously. occ. 2
yes 3
very often 4

(b) To whom? (Enumerate) 12 56*

no spite (no ch.)
to others..... 3
other children 4
sibs..... 5
animals 6
M. 7
F. 8
anyone 9

66 (c) What does he do to them? 12 57

no spite (no ch.)	
other.....	(0)
verbal	1
takes other ch's things	2
spiteful interference	3
hits	(4)
pulls hair	5
pinches	6
scratches	7
kicks	8
bites	9

(f) Methods tried: 12 58

no spite (no ch.)	
nil	0
other.....	4
reproach	(5)
deprivation	6
do same to C.	7
smack	8
isolate	9

67. Do you find him saying nasty things:

(a) To you? 12 59

no	0
occ.	(1)
yes	2
very often	3

(b) To ?.? 12 60

	(0)
	1
	2
	3

(c) What done? 12 61

(not applic. no ch.)	
nil	(0)
other.....	4
reproach	5
deprivation	6
smack	8
isolate	9

N.B. Repeat columns 1 - 10

Card Type (4) 11

68. Does he ever have charge of other children? (Specify)

12 12

nil	(0)
on street, occ. other ch.	2
occ. sibs.	3
yes, other ch.	4
yes, sibs.	5
in house, occ. other ch.	6
occ. sibs.	7
yes, other ch.	8
yes, sibs.	9

69. (a) Is he allowed out of doors on his own? 12 13

no	0
private yard/gardon	4
public balcony	5
street, with older ch.	6
whom... ..... . age... ..	
courtyard	(7)
own pavement	8
across road	9

(b) Ever gets lost? 12 14

no	(0)
always trivial, 1 or 2	1
been serious, 1 or 2	2
always trivial, occ.	3
been serious, occ.	4
always trivial, def. tend.	5
been serious, def. tendency	6

If serious, details.

(c) Ever sent on errands? 12 15

no	(0)
other .... occ.	1
yes	2
very often	3
to neighbours etc. occ.	4
yes	5
very often	6
to shops (+ neighbours etc.): occ.	7
yes	8
very often	9

No. 020 ..ge: 05 M 52y (C4)

70. Does he as a rule, without help

(a) Wash and dry own hands? 12 16*

N	0
R	1
S	2
U	(3)

(b) Wash and dry own face? 12 17

N	0
R	(1)
S	2
U	3

(c) Wash self in bath? 12 18*

N	(0)
R	1
S	2
U	3

71 (a) Does he usually undress himself at night? 12 19

nil		0
other.....	R	1
	S	2
	U	3
all but difficult fastenings	R	4
	S	(5)
	U	6
everything	R	7
	S	8
	U	9

(b) How far does he dress himself in the mornings, as a rule? 12 20*

nil		0
other.....	R	1
	S	2
	U	3
all but difficult fastenings	R	4
	S	5
	U	(6)
everything	R	7
	S	8
	U	9

(c) (If less than 9 above). Can he do more, or has he little opportunity? 12 21*

(not applic. no ch.)	
other	1
can't do more: but tries	6
can do more: little opp.	(7)
"lazy"	8
little opp. and "lazy"	9

72 (a) Does he mind if people see him without clothes? 12 22*

(b) Or in the toilet? 12 23*

	(a)	(b)
no	0	0
some of family (sp).....	4	4
some strangers	5	5
all strangers	6	6
some strangers + some family (sp).....	7	7
all strangers + some family (sp)..	(8)	8
anyone	9	(9)

73. Does he ever see children of the opposite sex without clothes on? 12 24*

no	(0)
doubtful	1
yes, occ.	2
yes, reg.practice	3

74(a) Does he ever see you without clothes on? 12 25

no	0
occ.	1
def. yes	2

(b)(Nakedness - M's attitude.) 12 26

def. policy	1
unconcerned	2
mildly concnd.	3
def. concerned	4

(c) Ever sees F. without clothes on? 12 27

no	0
occ.	1
def. yes	2

No. 070 Age: 05 N52z (04)

75. Does he show guilt of his own accord, before you show you are displeased with him?

(a) On taking things without permission.

12 28*

(spont. "problem")	11
no	(0)
doubtful/variable	1
yes	2
never occurs	9

(b) On telling an untruth.

12 29*

"problem"	11
	0
	1
	(2)
	9

(c) Is untruthfulness a problem? (punch 11, in b) What does he tell fibs about?

[illegible]

(d) Any habits reported: (punch severest)

12 30

no	(0)
doubtful/variable	1
yes	2
never occurs	9

(list opposite appropriate no.)

76 (a) Is he often disobedient with you?

12 31*

N	0
R	1
S	(2)
U	3

(b) Can you trust him not to touch things if you've told him not to?

12 32*

N	0
R	1
S	2
U	(3)

77. What punishment do you use? (enumerate) (exclude telling off).

(a) Smacking:

12 33*

never	0
less	1
1 or 2/w.	(2)
sev./w.	3
1 or 2/day	4
sev./day	5
constantly	6

(b) Other punishment

12 34*

nil	0
(variable)	
other...	3
withdrawal of affec.	(4)
threats	5
threats to tell F.	(6)
deprivations	(7)
isolates	8
(smacking)	

(c) Which upsets most?

12 35*

	0
	1
	3
	4
	5
	6
	(7)
	8
	9

78. What punishment does F. use? (enumerate)

(a) Smacking

12 36*

never	0
less	(1)
1 or 2/w.	2
sev./w.	3
1 or 2/day	4
sev./day	5
constantly	6

(b) Other punishment:

12 37*

nil	0
(variable)	
other.....	3
withdrawal of affec.	4
threats	(5)
deprivations	7
isolate	(8)
(smacking)	

(c) Which upsets most?

12 38*

	0
	1
	3
	4
	5
	7
	(8)
	9

79. How does he take a smacking?

(a) From you

12 39*

no smacking	0
other.....	1
making up	2
cheerful	3
indifferent	4
verbal protest	5
retaliation	6
resentful(silent)	7
unhappy	8
cries, whimpers	(9)

(b) From F.

12 40*

	0
	1
	2
	3
	4
	5
	6
	7
	8
	(9)

No. 070 ..ge. 05 N 52aa (C4)

SPEECH

80 (a) Is there any difficulty with his talking? (b) Does he ever stutter or stammer?

	12 41		sp. difficulty	12 42
nil	(0)		no	(0)
other,..... .	1		occ.	1
talks too much	2		often	2
bad accent	3			
swearing	4			
lisping/lalling	5			
babyish	6			
stuttering	7			
diffic. to understand	8			
backward	9			

81. Does he ever say anything about death? [illegible] 12 43

Details [illegible]

no	0
yes	(9)

82. Does he ever say anything about God? 12 44

Details· [illegible]

no	0
yes	(9)

83. Does he ever go to:

(a) Church· 12 45

never	0
less	1
monthly +	2
weekly +	(3)

(b) Sunday School: 12 46

	(0)
	1
	2
	3

(c) Denomination: 12 47

never goes (no ch.)	
R.C.	1
C/E	(2)
Nonconformist	3
Jewish	4
other.....	5

84. Are there any other points about him that you'd like to mention? 12 48

no	(0)
yes	9

No. 070 Age: 05

M 52 bb (C4)

REMARKS	MEMORANDA

Next Interview. Sec Q. (1) (2) 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, (13) (14), 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, (27) (28) 29, 30, 31, 32, 33, 34, (35) 36, 37, 38, (39) 40, (41) (42) 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, (56) 57, 58, 59, 60, (61, 62, (63) 64, 65, 66, 67, 68, 69, 70, 71, (72) 73, 74, 75, 76, 77, 78, 79, 80, 81, (82, 83,) 84.

M 6/a

Report on Child (7 Years)

Name _____ Date _____ Date due _____

No. (_ _ _) 1-3 Class ( ) 7

Age (_ _) 4-5 Investigator (_ _) 8-9

Revision (1) 6

Group A 4
B 5
C 6
D 7

Sex: Females 8
Male 9

12 10

Not done 0
Early 1w+ 1
2w+ 2
4w+ 3
Late 1w+ 4
2w+ 5
4w+ 6
2m+ 7
4m+ 8
To time 9

Card Type (6) 11

Remarks: _____

12 12

Special circs.
nil special 0
other 1
temporarily upset (falls etc.) 6
poor health 7
recent emot. disturbance 8
C. not accomp. by M, or permanent substitute 9

Timing of Session

12 13

Time of starting:
9 a.m. or earlier 0
10 a.m. 1
11 a.m. 2
12 noon 3
1 p.m. 4
2 p.m. 5
3 p.m. 6
4 p.m. 7
5 p.m. 8
6 p.m. or later 9

12 14

Duration:
15 or less 0
20 mins. 1
25 mins. 2
30 mins. 3
35 mins. 4
40 mins. 5
45 mins. 6
50 mins. 7
55 mins. 8
60 or more 9

Initial Adjustment

No. _____ Age _____ M 64b

SCHONELL GRADED READING VOCABULARY TEST (R 1)

Reading Age (_ _ _) Cols. 15-17

Reading Quotient (_ _ _) Cols. 18-20

Reading Age = $\frac{\text{No. of words read}}{10}$ + 5 years =

Reading Quotient = $\frac{\text{Reading Age}}{\text{Chronological Age}}$ x 100 =

No. _____ Age: _____ M 53 c

BESTIAIRE

Introduction: Do you like stories? Right, let's make up a story together. Let's pretend I'm like a fairy:- Of course you know I'm not a fairy - don't you? It's a game. Right, let's pretend I'm a good fairy and that I can turn you into an animal - then you'l turn back into a little boy (girl) afterwards.

1. What animal would you like to be? _____ 12 34

2. Why would you like to be a _____? _____ No pref. 0
_____ refusal 1
don't know 2
other..... 3

3. What would you do if you were a _____? _____ irrelevant 4
'nice' 5
_____ gentle 6
strong 7

4. Good! Now you turn back into a little boy (girl). unpleasant 8
What animal would you not like to be at all? _____ fierce 9
_____

12 35

5. Why would you not like to be _____? _____ no dislike 0
_____ refused 1
don't know 2
other..... 3
_____ irrelevant 4
nice 5

6. Good! Now you turn back into a little boy (girl). Right? gentle 6
Now tell me all the animals which you really like? strong 7
(Get 3 more). unpleasant 8
fierce 9
_____
_____

7. Now tell me all the animals which you don't like? (3 more)
_____
_____

Preferences for periods of life

Now we'll play another little game.

12 36

8. First, tell me, how old are you? "Own age": refusal 1
don't know 2
_____ younger: more 3
1 year 4
correct age 5
older: 1 yr 6
2 + 7
4 + 8
adult 9

9. What would you like to be the best: a little baby, a grown-up, or a child of _____ (C's age)? 12 37
Preferred age: no pref. 0
_____ refused 1
don't know 2
other..... 3
baby 6
own age 7
older child 8
adult 9

10. Why is it nice to be _____? _____

_____

_____

_____

12 38

11. Would it be nice to be a little baby? _____ Baby:

12. Why is it nice (not nice) to be a little baby? _____

refused	1
don't know	2
yes	7
preferred	8
no	9

_____

_____

_____

12 39

13. Would it be nice to be a grown-up? _____ Grown-up:

14. Why is it nice (not nice) to be a grown-up? _____

_____

_____

_____

_____

refused	1
don't know	2
yes	7
preferred	8
no	9

12 40

15. Is it nice to be a child of _____? _____ C's age:

16. Why is it nice to be a child of _____? _____

_____

_____

_____

_____

refused	1
don't know	2
yes	7
preferred	8
no	9

Sex Preferences

(Start with opposite sex. Reverse the given order for girls.)

12 41

17. Would it be nice to be a lady? _____ Lady:

18. Why? _____

_____

_____

_____

refused	1
don't know	2
yes	7
no	9

12 42

19. Would it be nice to be a man? _____ Man:

20. Why? _____

_____

_____

_____

refused	1
don't know	2
yes	7
no	9

12 43

21. Which would you like the best, to be a man or a woman? _____ Man/woman:

22. Why? _____

_____

_____

_____

refused	1
don't know	2
other.....	3
girl	6
boy	7
woman	8
man	9

12 44

23. Would it be nice to be a girl? _____ Girl:
24. Why? _____

refused 1
don't know 2
yes 7
no 9

12 45

25. Is it nice to be a boy? _____ Boy:
26. Why? _____

refused 1
don't know 2
yes 7
no 9

12 46

27. Which would you like the best to be, a boy or a girl? Boy/girl:
28. Why? _____

refused 1
don't know 2
other..... 3
girl 6
boy 7
woman 8
man 9

12 47

29. When you're grown-up will you get married? Married;
30. Why? _____

refused 1
don't know 2
yes 7
no 9

12 48

31. Would you like to have children? _____ Children:
32. Why? _____

refused 1
don't know 2
yes 7
no 9

12 49

33. How many children, a lot or not many? Family size:

refused 1
don't know 2
1 3
2 4
3 5
4 6
5 7
more (own family size) 8
more (other) 9

12 50

34. Would you rather have boys or girls? Boys/girls:
35. Why? _____

refused 1
don't know 2
neither 3
both 4
girls 5
boys 6

No. _____ Age: _____ M 53f

SUMMARY SCORES

Periods of life:

baby: 12 51		grown-up: 12 52		own age: 12 53	
-	0		0		0
?	1		1		1
+ -	2		2		2
+ +	3		3		3

Sex preferences:

boy: 12 54		girl: 12 55		man: 12 56		woman: 12 57	
-	0		0		0		0
?	1		1		1		1
+ -	2		2		2		2
+ +	3		3		3		3

BESTLAIFE RATINGS

S Interest in Test _____ 12 58 (_)

IK Imagination _____ 12 59 (_)

XX Relevance of Replies _____ 12 60 (_)

REMARKS

_____

_____

_____

_____

_____

_____

_____

No. _____ Age: _____ M 53g

N.B. Repeat columns 1 - 10

Card Type (7) 11

Lerner Blocking Test

1. "How can I pass"

	(a) 12 12	(b) 12 13
refuses situation	0	0
other.....	1	1
nurturance	2	2
passive reaction	3	3
withdrawal/escape	4	4
detour/compromise	5	5
amicable compromise	6	6
non. agg. assertion	7	7
indirect agg./accidents/verbal	8	8
direct aggression	9	9

2. Doll meets car

	(a) 12 14	(b) 12 15
refuses situation	0	0
other.....	1	1
nurturance	2	2
passive reaction	3	3
withdrawal/escape	4	4
detour/compromise	5	5
amicable compromise	6	6
non. agg. assertion	7	7
indirect aggression/verbal	8	8
direct aggression	9	9

3. Doll rides on train

	(a) 12 16	(b) 12 17
refuses situation	0	0
other.....	1	1
nurturance	2	2
passive compliance	3	3
withdrawal/escape	4	4
friendly compliance	5	6
non. agg. assertion	7	7
indirect aggression/accidents/verb.	8	8
direct assertion	9	9

4. "Who is going to crash?"

	(a) 12 18	(b) 12 19
refuses situation	0	0
other.....	1	1
nurturance	2	2
passive reaction	3	3
withdrawal/escape	4	4
detour	5	5
amicable compromise	6	6
non. agg. assertion	7	7
indirect aggression/verbal	8	8
direct aggression	9	9

5. "Who'll get there first?"

	(a) 12 20	(b) 12 21
refuses situation	0	0
other.....	1	1
nurturance	2	2
passive reaction	3	3
withdrawal/escape	4	4
detour	5	5
amicable compromise	6	6
non. agg. assertion	7	7
indirect aggression/verbal	8	8
direct aggression	9	9

6. C's House, can E's doll enter?

	(a) 12 22	(b) 12 23
(i) refuses situation	0	0
other.....	1	1
yes	8	8
no	9	9

(ii) What happens?

	(a) 12 24	(b) 12 25
nil special/refused	0	0
other.....	1	1
household activities	2	2
sleep	3	3
nurturance	4	4
accident/verb. agg.	5	5
aggression	6	6
punishment	7	7
shut in/out	8	8
fear/escape/hiding	9	9

7. E's house, can C's doll enter?

	(a) 12 26	(b) 12 27
(i) refuses situation	0	0
other.....	1	1
yes	8	8
no	9	9

(ii) What happens?

	(a) 12 28	(b) 12 29
nil special/refused	0	0
other.....	1	1
household activities	2	2
sleep	3	3
nurturance	4	4
accident/verb. agg.	5	5
aggression	6	6
punishment	7	7
shut in/out	8	8
fear/escape/hiding	9	9

8. E's house, C. must not touch: can he?

	(a) 12 30	(b) 12 31
(i) refuses situation	0	0
other.....	1	1
yes	8	8
no	9	9

(ii) What happens?

	(a) 12 32	(b) 12 33
nil special/refused	0	0
other.....	1	1
pleasant/neut. things	2	2
non. agg. assertion	3	3
aggression	4	4
accident/verb. agg.	5	5
punishment: other.....	6	6
send for authority	7	7
smack	8	8
fear/escape/hiding	9	9

C's house, E. must not touch: does so, what happens?

9.

	(a) 2 34	(b) 12 35
(i) refuses situation	0	0
other.....	1	1
accepts situation	2	2

9. What happens?

	(a) 12 36	(b) 12 37
(ii) nil special/refused	0	0
other.....	1	1
pleasant/neut. things	2	2
non. agg. assertion	3	3
aggression	4	4
accident/verb. agg.	5	5
punishment: other	6	6
smnd for authority	7	7
smack	8	8
fear/escape/hiding	9	9

_____

_____

BLOCKING TEST: Themes and Behaviour

Avoids situation offered _____ (____) —

Assertion (explicitly permitted) _____ (____) —

Assertion, other, aggressive, direct _____ (____) —

Assertion, other, aggressive, displaced _____ (____) —

Assertion, non-aggressive _____ (____) —

Assertion, verbal only _____ (____) —

Accidents _____ (____) —

Punishment _____ (____) —

Boredom _____ (____) —

Withdrawal/escape _____ (____) —

Fear _____ (____) —

Detour _____ (____) —

Fear of E's reaction _____ (____) —

Reparations _____ (____) —

Spontaneous nurturance _____ (____) —

Friendly compliance _____ (____) —

REMARKS:

_____

_____

_____

_____

_____

_____

Name _____ Age ____ M 533/II

N.B. Repeat Columns 1-10

Card Type (12) 11
(3)

	1 a b	2 a b	3 a b	4 a b	5 a b	Total	6 a b	7 a b	8 a b	9 a b	Total	Total
Avoid situation						12-13 ( )					36 ( )	51-52 ( )
Agg./Assertion												
Any						14-15 ( )					37 ( )	53-54 ( )
Any aggression						16-17 ( )					38 ( )	55-56 ( )
Any Non-agg./ assertion						18-19 ( )					39 ( )	57-58 ( )
Overt agg./Ass.						20-21 ( )					40 ( )	59-60 ( )
Them} overt agg./Ass.						22-23 ( )					41 ( )	61-62 ( )
Other mitigation (displacement excuse, "accident" etc.)						24-25 ( )					42 ( )	63-64 ( )
Catastrophe						-----					43 ( )	-----
Injury/death						-----						65-66 ( )
C. enjoys agg./ass.						-----						67-68 ( )
Guilt etc.												
C. obeys						-----					44 ( )	-----
Punishment						-----						69-70 ( )
Any thematic (include denial)						26-27 ( )					45 ( )	71-72 ( )
Avoidance etc.												
C. detours						28 ( )					-----	-----
Other avoidance/ escape/fear						29 ( )					46 ( )	73-74 ( )
+ve reactions												
Nurturance/household activities						-----					47 ( )	-----
Any (include amic. compr. or amic compl.)						30-31 ( )					48 ( )	75-76 ( )
Passive reaction/ nill special						32-33 ( )					49 ( )	77-78 ( )
Overt discomfiture						34-35 ( )					50 ( )	79-80 ( )

No. _____ Age _____ M 6pk

N.B. Repeat columns 1-10

Card Type (8) 11

SMELL REACTIONS

I. Judgement	A		B		C		D		E		F		G		H		I		J	
	12	12	12	13	12	14	12	15	12	16	12	17	12	18	12	19	12	20	12	21
Very nice	1		1		1		1		1		1		1		1		1		1	
Quite nice	2		2		2		2		2		2		2		2		2		2	
Neutral	3		3		3		3		3		3		3		3		3		3	
Quite nasty	4		4		4		4		4		4		4		4		4		4	
Very nasty	5		5		5		5		5		5		5		5		5		5	

II. Physical Aversion	A		B		C		D		E		F		G		H		I		J	
	12	22	12	23	12	24	12	25	12	26	12	27	12	28	12	29	12	30	12	31
Nil	1		1		1		1		1		1		1		1		1		1	
Mild	2		2		2		2		2		2		2		2		2		2	
Definite	3		3		3		3		3		3		3		3		3		3	
Very marked	4		4		4		4		4		4		4		4		4		4	

III. Emotional Conflict	A		B		C		D		E		F		G		H		I		J	
	12	32	12	33	12	34	12	35	12	36	12	37	12	38	12	39	12	40	12	41
Nil	1		1		1		1		1		1		1		1		1		1	
Other	2		2		2		2		2		2		2		2		2		2	
Laughs	3		3		3		3		3		3		3		3		3		3	
Embarrassed	4		4		4		4		4		4		4		4		4		4	

REMARKS _____

Affective Tone: Total ( ) 42-43
Physical Aversion: Total ( ) 44-45
No. of conflicts ( ) 46-47
No. of laughs ( ) 48
No. of embarrassed ( ) 49
No. of other conflicts ( ) 50

No. _____ Age _____ M 641

TOUCH REACTIONS

I. Signs of pleasure-displeasure

	A 12 54	B 12 55	C 12 56	D 12 57	E 12 58	F 12 59
Clearly likes	1	1	1	1	1	1
Mildly likes	2	2	2	2	2	2
Neutral/nil	3	3	3	3	3	3
Mildly dislikes	4	4	4	4	4	4
Clearly dislikes	5	5	5	5	5	5

II. Physical Aversion

	A 12 60	B 12 61	C 12 62	D 12 63	E 12 64	F 12 65
Nil	1	1	1	1	1	1
Mild	2	2	2	2	2	2
Definite	3	3	3	3	3	3
Very marked	4	4	4	4	4	4
Will not touch	5	5	5	5	5	5

III. Emotional conflict

	A 12 66	B 12 67	C 12 68	D 12 69	E 12 70	F 12 71
Nil	1	1	1	1	1	1
Other	2	2	2	2	2	2
Laughs	3	3	3	3	3	3
Embarrassed	4	4	4	4	4	4

REMARKS _____

Affective tone: Total (_ _) 72-73
Physical Aversion: Total (_ _) 74-75
No. of conflicts (_) 76
No. of laughs (_) 77
No. of embarrassed (_) 78
No. of other conflicts (_) 79

No. _____ Age _____ M 64m

N.B. Repeat columns 1-10

Card Type (9) 11

GENERAL RATINGS

A	Initial Adjustment	12	26
B	Emotional dependence on M. ___	12	27
	(or _____)		
C	"Nervousness"	12	28
D	Positive Affect	12	29
E	Negative Affect	12	30
F	Pos. Soc. Resps. to E's (Freq.)	12	31
(G)	Pos. Soc. Resps. to E's (Int.)	12	32
H	Neg. Soc. Resps. to E's (Freq.)	12	33
(I)	Neg. Soc. Resps. to E's.(Int.)	12	34
K	Excitability	12	35
L	Expressiveness	12	36
M	Verbal communicativeness	12	37
N	Activity	12	38
O	Aggressiveness to things	12	39
P	Aggressiveness to persons	12	40
R	Willingness to conform	12	42
Y	Orderliness	12	47
DD	Requests for Toys etc.	12	50
EE	Criticism	12	51
AE	Fidgetiness	12	62
AF	Continuity of Behaviour	12	63
AG	Self-display	12	64
AH	Overt signs of guilt	12	65
AI	Strength of assertive phantasy	12	66
AJ	Strength of fear phantasy	12	67
AK	Strength of love/nurturance phantasy	12	68
AL	Inhibitions	12	69

No. _____ Age. _____ M 64n

Pavlov Types		12	71
Unclassifiable		0	
Mixed		1	
Doubtful:	"Choleric"	2	
	"Sanguine"	3	
	"Phlegmatic"	4	
	"Melancholic"	5	
Clearly:	"Choleric"	6	
	"Sanguine"	7	
	"Phlegmatic"	8	
	"Melancholic"	9	

SUMMARY.

Report on Child (8 years)

Name _____ Date _____ Date due _____

No. (_ _ _) 1-3 (_ _) 7

Age (0 8) 4-5 Investigator (_ _) 8-9

Revision ( ) 6

Group A	4
B	5
C	6
D	7
Sex Female	8
Male	9

10

Not done	0
Early 1w+	1
2w+	2
4w+	3
Late 1w+	4
2w+	5
4w+	6
2m+	7
4m+	8
To time	9

Circumstances: _____

_____

_____

_____

_____

_____

_____

Card type (6) 11

Special circs. 12 12

nil special	0
other	1
not following phys. exam.	2
temporarily upset (falls etc.)	6
poor health	7
recent emot. disturbance	8
C. not accomp. by M, or permanent substitute	9

TERMAN-MERRILL TEST

I.Q. (_ _ _) 13-15

_____ Scatter (_) 16

_____

_____

_____

_____

_____

_____

_____

_____

Age levels: Basic (no failure) Highest pass

	Basic (no failure) 12 17	Highest pass 12 18
5 or under	0	0
6	1	1
7	2	2
8	3	3
9	4	4
10	5	5
11	6	6
12	7	7
13	8	8
14 or over	9	9

Ratings on Test Behaviour:

Rx Cooperativeness _____ ( ) 19

S Interest in Test _____ ( ) 20

DD Requests for Toys _____ ( ) 21

FF Self-criticism _____ ( ) 22

GG Confidence of approach to task _____ ( ) 23

WW Goal directedness in task _____ ( ) 24

ROSENZWEIG PICTURE-FRUSTRATION TEST

Time

started P.F.(i) _____

started T.M. _____

started P.F.(ii) _____

finished . . . . _____

Dur. Terman: mins (_ _) 25-26

(i) - (ii) + 10 mins. (_ _ . _) 27-29

Sequence: AB 12 30

BA 11

. . . . . .

Unscorable responses: 1, 2, 3, 4, 5, 6, 7

8 or more doubtful validity: 8, 9

Codes for Scoring / Affect

Scoring		Affect
multiple score	12	overtly aggress.
I	11	delay
E	0	neutral
E'	1	. . . .
E	2	firmly ass.
e	3	mildly ass.
I'	4	hesitant
I	5	apologetic
i	6	placatory
M'	7	seek P's app.
M	8	coaxing
m	9	humorous

A.	O-D.	E-D.	N-P	Code	Affect
1.					
					31-2
2.					
					33-4
3.					
					34-6
4.					
					37-8
5.					
					39-40
6.					
					41-2
7.					
					43-4
8.					
					45-6
9.					
					47-8
10.					
					49-50
(Why in bed?)					
11.					
					51-2
12.					
					53-4
E					. . . .
I					
M					
Total					

Scoring		Codes for Affect
multiple score	12	overtly aggress.
I	11	delay
E	0	neutral
E'	1	. . . . .
E	2	firmly ass.
e	3	mildly ass.
I'	4	hesitant
I	5	apologetic
i	6	placatory
M'	7	seeks E's app.
M	8	coaxing
m	9	humorous

B.

	O-D	E-D	N-P	Code		Affect
13.					55-6	
14					57-8	
15.					59-60	
16.					61-2	
17.					63-4	
18.					65-6	
19.					67-8	
20.					69-70	
21.					71-2	
22.					73-4	
23.					75-6	
24.					77-8	
E						
I						
M						
Total						

Ratings

P. Aggressiveness (overt) _____ ( ) 79

LL. Humour _____ ( ) 80

Test Behaviour _____

_____

_____

_____

_____

_____

N.B. Repeat columns 1-10. Card Type (7) 11

Scoring Profile

		O - D	E - D	M - P	Total	
E	A	____	____	____	____	
	B	____	____	____	____	
	Tot	(_ _ _) 12-14	(_ _ _) 16-18	(_ _ _) 20-22	____	= (_ _) 24-5
	Dif	___ = (_) 15	___ = (_) 19	___ = (_) 23	___ + 20	= (_ _) 26-7
I	A	____	____	____	____	
	B	____	____	____	____	
	Tot	(_ _ _) 28-30	(_ _ _) 32-34	(_ _ _) 36-38	____	= (_ _) 40-1
	Dif	___ = (_) 31	___ = (_) 35	___ = (_) 39	___ + 20	= (_ _) 42-3
M	A	____	____	____	____	
	B	____	____	____	____	
	Tot	(_ _ _) 44-46	(_ _ _) 48-50	(_ _ _) 52-54	____	= (_ _) 56-7
	Dif	___ = (_) 47	___ = (_) 51	___ = (_) 55	___ + 20	= (_ _) 58-9
Total	A	____	____	____	Check vertical and horizontal Totals = 24 - ____ unscorable	
	B	____	____	____		
	Tot	____	____	____	Check ____ = 100 ± 1.	
	%	= (_ _) 60-61	= (_ _) 64-65	= (_ _) 68-69		
	Dif	___ + 20 = (_ _) 62-3	___ + 20 = (_ _) 66-7	___ + 20 = (_ _) 70-1		

S - E Factors:

	A	B	Total	Diff.		
E	____	____	(_ _) 72-3	____ = (_) 74	_____	( ) 78
I	____	____	(_ _) 75-6	____ = (_) 77	_____	( ) 79
					_____	( ) 80

ERICSON TECHNIQUE

Initial reaction ______________________________

Resp. to interruption ______________________________

Resp. to resumption ______________________________

General Behaviour ______________________________

Sequence of Play	Speech

Sequence of Play - continued	Speech

Time _____ mins.

Reaction to closure _____

Explanation: _____

N.B. Repeat cols. 1-10. Card Type (8) 11

Material available (punch 12 if ringed for items missing)			Used
People: family	6	12	(_) 12
other	6	12	(_) 13
Animals:	9	12	(_) 14
Vehicles:	5	12	(_) 15
Furniture: Living room	14	12	(_ _) 16-17
bedroom	5	12	(_) 18
bathroom	3	12	(_) 19
kitchen	2	12	(_) 20
Blocks:	36	12	(_ _) 21-22
No. of Types:	5		(_) 23
No. of pieces:	85	12	(_ _) 24-25

Code for Roles

(not available,-.no ch.)

other	12
neutral	11
not used	0
aggressive	1
controlling	2
helping/nurturing	3
receiving aggression	4
" control	5
" help/nuture	6
other 'good'	7
other 'bad'	8
mixed	9

Roles:

Mother (M) _____ ( ) 26

Father (F) _____ ( ) 27

Girl (g) _____ ( ) 28

Boy (b) _____ ( ) 29

Baby (B) _____ ( ) 30

Old Man (Om) _____ ( ) 31

Black Man (Bm) _____ ( ) 32

Nurse (N) _____ ( ) 33

Policeman (P) _____ ( ) 34

Gurman (Gm) _____ ( ) 35

Cowboy (Cb) _____ ( ) 36

Indian (I) _____ ( ) 37

Lying dog (ld) _____ ( ) 38

Running dog (rd) _____ ( ) 39

Horse (h) _____ ( ) 40

Bull (bl) _____ ( ) 41

Bear (br) _____ ( ) 42

Ape (a) _____ ( ) 43

Lion (li) _____ ( ) 44

Crocodile (cr) _____ ( ) 45

Use of blocks:

Buildings, roofed or partly roofed _____( ) 46

Enclosures _____( ) 47

Barriers _____( ) 48

Arches/decorated gateways _____( ) 49

Towers _____( ) 50

Roads/pavements _____( ) 51

Tunnels/bridges _____( ) 52

Other constructions: _____( ) 53

Vertical structures: maximum height (inches) _____( ) 54-5

Solidity: very insecure (1) to v. solidly built (5) _____( ) 56

Use of space: est. fraction of surface used (tenths of total) ( ) 57

Location: _____ 12 58

. 11

whole table	0
central	1
dispersed	2
diagonal	3
predominately left	4
" right	5
" forward	6
" back	7
entirely forward	8
" against back wall	9

Shape, if definite _____( ) 59

Scene: _____ 12 60

indoor only	1
outdoor only	2
both, clearly separated	3
both, not " "	4
unclassified	9

Movement:	Vehicles 12 61	People/animals 12 62
acted out	11	11
completely static	0	0
gentle/quiet/slow, 1 element only	1	1
" " " more than one	2	2
moderate/unspecified, 1 only	3	3
" " more	4	4
vigorous/ rapid, 1 only	5	5
" " more	6	6
out of control	7	7
blocked, arrested	8	8
falling	9	9

Themes (use reference numbers to description of play sequence)

Code	
nil	0
passing allusion only	1
1 episode, 1 character	2
1 episode, 2+ characters	3
2+ episodes, 1 character	4
2+ " 2+ characters	5
marked importance	9

Food _____ ( ) ___ 63

Sleep _____ ( ) ___ 64

Washing _____ ( ) ___ 65

Toilet _____ ( ) ___ 66

T.V. _____ ( ) ___ 67

Other domestic _____ ( ) ___ 68

Help/Nurturance _____ ( ) ___ 69

Intrusion _____ ( ) ___ 70

Naughtiness/Punishment _____ ( ) ___ 71

Accidents _____ ( ) ___ 72

Oral aggression _____ ( ) ___ 73

Other aggression _____ ( ) ___ 74

Illness _____ ( ) ___ 75

Digust/dislike _____ ( ) ___ 76

_____ ( ) ___ 77

Other themes _____ ( ) ___ 78

_____

_____

Masculinity/Femininity: from material used _____ ( ) ___ 79

from themes and constructions _____ ( ) ___ 80

Remarks: _____

_____

_____

_____

_____

_____

_____

_____

_____

No. ___ Age: ___

L.B. Repeat Columns 1-10

Card Type (9) 11

Erikson Play Situation R.TIGS

____	Negative reaction to interruption	(___) 12	12
____	Request to change occupation	(___) 12	13
____	Requests for extra material	(___) 12	14
cf.T.	Interest in Play	(___) 12	15
cf.V.	Exploitation of Material	(___) 12	16
G.G.	Confidence of approach to Test	(___) 12	17
K.K.	Imagination	(___) 12	18
J.J.	Negative reaction to end of situation	(___) 12	19
W.W.	Goal directedness in task	(___) 12	20
Y.Y.	Complexity of product	(___) 12	21
Z.Z.	Organization	(___) 12	22
Y.	Orderliness	(___) 12	23
____	Reality References	(___) 12	24
____	Realism in Play	(___) 12	25

. . . . . .

General

A	Initial Adjustment	(___) 12	26
B	Emotional dependence on M. ____ (or _____)	(___) 12	27
C	"Nervousness"	(___) 12	28
D	Positive Affect	(___) 12	29
E	Negative Affect	(___) 12	30
F	Pos. Soc. Resps. to E's (Freq.)	(___) 12	31
(G)	Pos. Soc. Resps. to E's (Int.)	(___) 12	32
H	Neg. Soc. Resps to E's (Freq.)	(___) 12	33
(I)	Neg. Soc. Resps. to E's (Int.)	(___) 12	34
K	Excitability	(___) 12	35
L	Expressiveness	(___) 12	36
M	Verbal communicativeness	(___) 12	37
N	Activity	(___) 12	38
O	Aggressiveness to things	(___) 12	39
P	Aggressiveness to persons	(___) 12	40

No. ____ Age: ____ M 65

AA	Tendency to seek attention	12 (___)	48
___	Social confidence	12 (___)	49
___	Seeking sanction/reassurance	12 (___)	50
___	Other questions	12 (___)	51
LL	Humour	12 (___)	53
PP	Co-ordination of Movement	12 (___)	56
QQ	Enunciation	12 (___)	57
RR	Maturity of Language Use	12 (___)	58
SS	Comprehension of Language	12 (___)	59
AE	Fidgetiness	12 (___)	62
AF	Continuity of Behaviour	12 (___)	63
AG	Self-display	12 (___)	64
AH	Overt signs of guilt	12 (___)	65
AI	Strength of assertive phantasy	12 (___)	66
AJ	Strength of fear phantasy	12 (___)	67
AK	Strength of love/nurturance phantasy	12 (___)	68
AL	Inhibitions	12 (___)	69

SUMMARY

ABBREVIATIONS USED ON INTERVIEW BLANKS

Anx.C.	=	Anxiety about child.
Anx.H.	=	Anxiety about home and family.
Anx.S.	=	Anxiety about self.
Av.	=	Average
B.l.v.	=	Before last visit
C.	=	Centre, Child.
Conv. H.	=	Convalescent Home.
C.l.o.	=	Cod liver oil.
Cl.T.	=	Class Teacher.
D.L.	=	Doesn't like.
D.N.	=	Day Nursery.
Displ.	=	Displeasure.
D.W.	=	Doesn't want.
E.D.D.	=	Expected date of delivery.
E.	=	Experimenter.
Enum.	=	Enumerate (i.e. mention each category)
E.K.	=	Extremely keen.
E.W.	=	Extremely well.
F.	=	Father.
F.T.	=	Full-time.
F.W.	=	Fairly well.
Fav.	=	Favours.
Fav. dem.	=	Favours demand feeding.
Fav. reg.	=	Favours regular feeding.
G.	=	Grade (of school)
H.	=	Home.
Hrly.	=	Hourly.
H.T.	=	Head Teacher.
K.	=	Keen.
L.	=	Lukewarm, little.
Lat.	=	Latitude.
L/N	=	Little or none.
m.	=	Month.
M.	=	Mother, much.
M.G.F.	=	Maternal grandfather.
M.G.M.	=	Maternal grandmother.

mins.	=	Minutes.
Mod.	=	Moderate.
Myth.	=	Mythical explanation (of childbirth)
N.	=	Neutral, none, never.
N.C.R.	=	No clear recollection.
No p. opp.	=	No present opportunity.
No ch.	=	No check.
Neg.	=	Negative.
N.S.	=	Nursery School.
N.W.	=	Not well.
Obj.	=	Objective explanation (of childbirth)
Opp.	=	Opportunity.
Occ.	=	Occasionally.
o.j.	=	Orange juice.
P.G.F.	=	Paternal grandfather.
P.G.M.	=	Paternal grandmother.
Phys.	=	Physical.
Pl.	=	Pleasure, place.
Pos.	=	Positive.
P.T.	=	Part-time.
R.	=	Remark added in response to a question.
Reg.	=	Rarely.
Resp.	=	Regularly.
R.N.	=	Response.
S.	=	Residential Nursery.
S.l.v.	=	Some, sometimes, sibling.
Soc.	=	Since last visit.
S.R.	=	Social.
Sp., spec.	=	Some reservations.
Sp. spont.	=	Specify (i.e. ask M. details)
Sup.	=	Spontaneous, spontaneously.
U.	=	Supplementary questions put.
Unfam.	=	Usually.
V.	=	Unfamiliar.
V.B.	=	Very.
V.P.	=	Very bad.
V.W.	=	Very pleased.
		Very well.

w.	=	Week.
y.	=	Year.
Ygr.	=	Younger.
Y.T.	=	Years together.