

Psychiatric Interviewing Techniques

IV. Experimental Study: Four Contrasting Styles

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Summary: The development and definition of four contrasting interview styles is described. The four styles were designed using different permutations of techniques which, on the basis of an earlier naturalistic study, appeared to be most effective in eliciting either factual information or feelings. A 'sounding board' style utilized a minimal activity approach; an 'active psychotherapy' style actively sought to explore feelings and to bring out emotional links and meanings; a 'structured' style adopted an active cross-questioning approach; and a 'systematic exploratory' style aimed to combine a high use of both fact-oriented and feeling-oriented techniques. Quantitative measures based on video-tape and audio-tape analysis showed that two experienced interviewers could be trained to adopt these four very different styles and yet remain feeling and appearing natural. An experimental design to compare the four styles is described.

Our naturalistic study of the initial interviews between psychiatric trainees and the parents of children referred to a psychiatric out-patient clinic showed a variety of statistically significant associations between interview styles or techniques on the one hand and outcome in terms of information obtained or emotions elicited on the other (Rutter and Cox, 1981; Cox, Hopkinson and Rutter, 1981, II; Hopkinson, Cox and Rutter, 1981). The results suggested that some interview techniques were likely to be more effective than others in eliciting detailed factual information, whereas other rather different techniques seemed to be optimal for eliciting emotions and feelings. The patterns of findings, especially with respect to active fact-oriented techniques strongly suggested that the associations represented causal influences, namely that the different interview techniques had caused different informant responses. However, because the study was non-experimental in design the causal inference was necessarily based on circumstantial evidence which could result only in tentative conclusions. This paper and its two companions report an experimental study testing the causal hypothesis directly (Cox, Rutter and Holbrook, 1981, V; Cox, Holbrook and Rutter, 1981, VI).

In planning the investigation, it was important to deal with various other limitations of the naturalistic study. Firstly, although the techniques associated with

more effective fact-gathering were rather different from those associated with the more effective eliciting of emotions, there seemed to be no incompatibility between the two. Indeed, in the naturalistic study, interviews with good factual coverage tended also to have rather above average levels of expressed feelings (Cox *et al.*, 1981, II). Earlier work designing research interviews had indicated that it ought to be possible to combine both sorts of techniques (Brown and Rutter, 1966; Rutter and Brown, 1966). However, the effects of combining techniques had still to be systematically tested. Accordingly, there was a need to compare the effects of interviews with combined techniques as against interviews aimed exclusively to be optimal for either fact gathering or eliciting emotions, but not both.

Secondly, comparisons in the naturalistic study had to rely on the assumption that each interviewer had a broadly similar group of informants. While in general this appeared to be the case, it was decided to ensure that each experimental style was employed with the same informants.

Thirdly, in the naturalistic study the possibility could not be entirely ruled out that the interviewer behaviour was a result rather than a cause of the informant's response. This problem could be met by deliberately altering the interview style, in experimental fashion, to determine if this had the predicted

effect on informant response. This required that both the styles to be compared should be used with each informant.

Fourthly, it had not been possible in the naturalistic enquiry to differentiate clearly between the style of interview and the interviewer's skills and competence. This limitation could be met by utilizing experienced interviewers each of whom would be trained to employ all the defined experimental styles.

Fifthly, the inferences to be drawn from the naturalistic study were complicated by the fact that some interviews were joint (i.e. with both parents) and some were individual (i.e. with just one parent). It was decided, therefore, to simplify the experimental comparisons by using only individual interviews with the mother of the child referred.

These five requirements formed the basis of the experimental design. By systematically varying interview techniques so that each informant was interviewed twice, once with one style and once with another it should prove possible to test the causal inferences. If the interview style was having a causal effect on the informant's responses, the variations in interview technique should lead to predictable and regular consequences in terms of the factual formation obtained and the feelings elicited. To maintain relevance for normal practice, however, the study needed to be in a clinical setting and the styles had to be ones which were actively used in ordinary practice and acceptable to both clients and clinicians.

Methods

Choice of style

The naturalistic study (Cox *et al*, 1981 II; Hopkinson *et al*, 1981) had suggested the importance of three active techniques designed to elicit factual information (a high rate of floorholdings and of topics first raised by the interviewer, a high rate of probes per topic, and many requests for detailed descriptions); and five active techniques designed to elicit emotional feelings (a high ratio of open to closed questions, and a

high number of interpretations, of expressions of sympathy, of requests for feelings, and of pick-ups of emotional cues). Four experimental styles derived from these findings, based on combinations of high and low usage of these two sets of active techniques (see Table I).

However, for the experimental study (necessarily involving parents of children referred to a psychiatric clinic as part of routine practice) to be ethically acceptable it was essential to have four styles, all of which could be used naturally and convincingly and all of which followed good interview practice. The aim was to compare different techniques, not to compare good and bad interviewing. Further, for the results to be clinically useful it was essential to compare styles which were advocated by experts in the field and were being used in psychiatric practice. In short, it was necessary to consider how the naturalistic study findings could be linked with clinical teaching and practice, and how both the use *and* the non-use of active techniques could form part of an acceptable and sensible interview style. Four styles were identified which fulfilled these criteria and are described in terms of their most obvious characteristics: (a) *sounding board*; (b) *active psychotherapy*; (c) *structured*; and (d) *systematic exploratory*.

(a) *Sounding board style*

The sounding board technique approximates to the style based on a low use of both types of active techniques and it is nearest to the psychiatric interviewing methods advocated by Finesinger (1948) who urged the value of 'minimal activity' because it allows 'the patient to talk more freely in meaningful areas'. Psychiatrists were warned against the temptation to use active techniques such as provocative interpretations or rapid probing because 'when successful, these methods tend to emphasize the doctor's omnipotence and magic powers. When unsuccessful, they . . . may give the patient feelings of guilt and inadequacy'.

TABLE I
Experimental styles deriving from naturalistic study

	Interviewer use of active fact-oriented techniques	
	Low use	High use
Interviewer use of active feeling oriented techniques	Low use	Low/low Low feeling oriented: High fact oriented
	High use	High feeling oriented: Low fact oriented High/high

In our procedure the interviewer started by asking in an open fashion about the informant's concerns, complaints or worries. The mother was allowed to decide what was important and the interviewer followed her lead. In order to keep her talking he used encouragements (mm-mm, yes, etc.), repetitions of her last words with a rising inflection, elaborations of the last word (e.g. 'you mentioned pain'), mild commands (e.g. 'tell me some more about that') and non-verbal cues (nods, smiles and so forth). The interviewer aimed to be warm, caring and interested but made minimal use of active techniques to elicit emotions; thus, interpretations, expressions of sympathy and emotional reflections were to be very little used. The interviewer was allowed to ask a direct question to introduce each major area (child symptoms, parental health, marital relationship, etc.) and to use checks to keep the informant talking, but otherwise should not probe, cross question or ask for specific examples. The general rationale of the style was to be non-intrusive and non-directive, to follow what the mother said and to allow her to make the running and decide what was relevant and important.

(b) *'Active psychotherapy' style*

The active psychotherapy technique approximates to the style based on a low use of active fact-oriented techniques and a high use of active feeling-oriented techniques. It is nearest to the diagnostic approach advocated by psychotherapists such as Balint (Balint and Balint, 1961) and Gill (Gill, Newman and Redlich, 1954). There is "the absolute necessity . . . of establishing a personal relationship between doctor and patient" (Balint and Balint, 1961). For the informant, 'the interview should be an impressive experience of being given the opportunity of revealing himself, of being understood, and of being helped to see himself—his past and present problems—in a new light' (Balint and Balint, 1961). The style was similar to the sounding board, in its aim to let the mother tell her story in her own fashion without cross-questioning, detailed probing or systematic coverage of predetermined areas. It was also similar in its use of encouragements to keep talking and its aim to follow the mother's lead. However, it was quite different in its intentions to actively intervene to explore feelings and bring out emotional links and meanings. To this end there was extensive use of open questions, reflective interpretations, requests for feelings and for self-disclosures, and expressions of sympathy. The interviewer sought to clarify the issues raised by the informant through picking up cues and through the use of open questions and responses to feelings, but there was no structured questioning in relation to fact gathering.

(c) *'Structured' style*

The structured style was, in a sense, the opposite of the active psychotherapy style in being based on a high use of active fact-oriented techniques. It was closest to the 'present state examination' interview developed by Wing and his colleagues (1967, 1977). The interviewer starts questioning with a firm set of ideas on the clinically important areas to be systematically covered. Thus, in contrast to the first two styles he is actively in charge of the factual content of the interview from the outset and directs the questions accordingly. He is warm, courteous, concerned and attentive to what the informant says; he picks up cues when they are relevant to his task but he provides the leads. The procedure is extremely flexible and nothing at all like a questionnaire. The wording and order of questions are adapted to the needs of each interview and whenever possible the informant's own words and ways of expressing things are used in formulating further probes. However, the interviewer's task is to cover pre-determined areas systematically and in all areas to obtain sufficient detail for him to judge whether any abnormality is present. This means that after the informant has described something in his own words, a process of clinical cross-examination is followed, using probes, asking for detailed descriptions and examples, and clarifying the situation by a variety of specific questions. Many closed questions are used and the interviewer actively directs the proceedings. On the other hand, the main verbal focus is on factual information and there is less direct concern with eliciting spontaneous feelings. Accordingly, very little use is made of interpretations, expressions of sympathy, requests for feelings and open questions generally. It is considered that feelings will be expressed more freely by a focus on what actually happened or was experienced rather than by a direct assault on the informant's emotions by trying to bring covert feelings to the surface.

(d) *'Systematic exploratory' style*

The fourth style approximates to one based on a high use of fact-oriented *and* feeling-oriented techniques. It is fairly close to a manner of interviewing which has many advocates but which may be exemplified by the techniques developed by Brown and Rutter (Brown and Rutter, 1966; Rutter and Brown, 1966; Quinton, Rutter and Rowlands, 1976) and it combines many of the features of both the active psychotherapy style and the structured approach.

In practice, the informant is first encouraged to tell things in her own words. She makes the running initially and the interviewer aims to establish from the beginning (through the use of interpretations, expressions of sympathy and requests for feelings) that he is

interested in emotions and attitudes as well as events and activities. Open questions are used liberally to encourage free expression and the interviewer aims to obtain as much information as possible by following up the informant's leads, rather than through specific questioning on new topics which he himself has to introduce. However, the interviewer is expected to get ample detailed descriptions and must use active questioning whenever required to ensure either systematic coverage of topics or sufficient detail on each topic to make an adequate clinical evaluation. In this respect there is no essential difference from the structured style. The contrast lies largely in its emphasis on feelings as well as facts, on style of questions (a greater use of open questions) and on its aim to explore emotional meaning as well as observed behaviour.

Experimental design

When comparing two or more different interview styles in an experimental design, tight control is only possible when each informant is interviewed with every style to be compared. In this way the style is varied but the informant remains the same so allowing

the effect of the former on the latter to be systematically studied. However, it would be impractical to interview each informant four times. Accordingly, a decision had to be taken on which comparisons were to have priority in the first instance. Because the naturalistic study findings provided clearer guidance and more straightforward hypotheses on active fact-oriented techniques it was decided to make these the basis of the paired comparisons. This choice was also guided by the view that whereas it was most unlikely that the use of feeling-oriented techniques would interfere with fact gathering, it was quite possible that systematic probing and detailed questioning could impede the expression of feelings. The design chosen allowed this latter possibility to be examined and is shown in Table II. Six mothers received the structured style first and the sounding board second (group A); six had these two interviews in the reverse order; six had the systematic exploratory style first and the active psychotherapy second; and six had these two interviews in the reverse order. Mothers were randomly allocated to the four conditions. Two experienced interviewers were used and each did an equal number of first and second interviews, and an equal number

TABLE II
Experimental design

Group	Interviewer order	Number of cases	Occasion of interview	
			I	II
A. Style Order	ST-SB	I ₁ - I ₂	I ₁ ST	I ₂ SB
		I ₂ - I ₁	I ₂ ST	I ₁ SB
	SB-ST	I ₁ - I ₂	I ₁ SB	I ₂ ST
		I ₂ - I ₁	I ₂ SB	I ₁ ST
B. Style Order	SE-AP	I ₁ - I ₂	I ₁ SE	I ₂ AP
		I ₂ - I ₁	I ₂ SE	I ₁ AP
	AP-SE	I ₁ - I ₂	I ₁ AP	I ₂ SE
		I ₂ - I ₁	I ₂ AP	I ₁ SE

I₁ = Interviewer 1; I₂ = Interviewer 2; ST = Structured style; SB = Sounding-board style; SE = Systematic-exploratory style; AP = Active psychotherapy style.

of interviews with each style. For each pair of styles a three factor, repeated measures, analysis of variance was performed to test for differences between styles and between interviewers and for order effects.

Because the pairing was made on the basis of active fact-oriented techniques, the effects of active feeling-oriented techniques could be examined only by comparisons across groups (see Table II: Group A versus Group B). The effects of informant variability are necessarily much greater in this analysis because the comparisons have to be made between—rather than within—informants. This constraint needs to be borne in mind in interpreting the findings.

To make the interviews as comparable as possible in duration, the interviewers attempted to keep all interviews to one hour. Whenever the first interview departed from this the other interviewer was instructed to try to lengthen or shorten the second interview so that the lengths of the paired interviews would be as similar as possible.

Again, in order to maintain comparability, the interviewers were told to regard the same information areas as a priority in all interview styles. The techniques to obtain them were, of course, different but the aims were similar and the scoring for data obtained referred only to these high priority areas. These consisted of the same list of child symptoms used in the naturalistic study, the type and quality of relationships within the nuclear family, the composition of the nuclear family and the characteristics of the home, the mental health and behaviour of both parents, and the styles of child-rearing used.

Clinical procedure

Unlike the naturalistic study, it was made a requirement that all interviews should be with the mother on her own, so avoiding the necessity of comparing mothers with fathers or dyads with triads. This required a much more substantial and complex liaison with the teams working in the clinic and also a much more careful preparation of the mothers since in most cases the interviewers were not going to be the therapists involved in the case after the two diagnostic interviews. Carefully designed letters were sent to all selected mothers inviting their co-operation. As in the naturalistic study, families were excluded where the parents were immigrant or where colloquial English was not the usual language spoken at home. In addition, in order to ensure greater comparability between interviews, referrals made for second opinions, or to consider admission to hospital were excluded, as were cases of isolated educational difficulty or those where psychosis, mental retardation or organic disorders were suspected. There were 14 boys (58 per cent) and 10 girls (42 per cent). The age range was

1 year 10 months to 15 years 7 months, with a mean of 9 years 10 months. The majority (75 per cent) were referred by General Practitioners. The remainder came mostly from educational sources (17 per cent) with one self-referral, and one from a community physician. A third (8) presented with conduct disorders; 7 (29 per cent) with emotional disorders; 7 (29 per cent) with disorders involving a mixture of emotional and conduct problems; and 2 (8 per cent) with enuresis or encopresis.

Of the mothers approached, approximately half decided not to participate in the project; these families were assessed and taken on for treatment in the usual way without going through the experimental interviews. In epidemiological studies high non-co-operation rates can cause an important bias (Cox *et al*, 1977). However, this was not a distorting effect in the present experimental study as the aim was to compare effects *within* the sample rather than to draw any conclusions about the sample characteristics as a whole. The effects of the contrasting interview techniques could be validly examined within the sample of mothers who agreed to participate since they were randomly assigned to style and interviewer.

The two experimental interviews took place during the usual waiting period for a diagnostic appointment and at the end of the second interview the father and the referred child (plus other members of the family where relevant) were seen in the usual way by the ordinary clinic team. With the mother's consent in all cases, the data obtained during the experimental interviews was made freely available to the clinicians seeing each family.

The interviews took place not less than a week and not more than three weeks apart: the usual gap was two weeks. Immediately before the first interview the interviewer explained the procedures to the mother and obtained her written consent to video recording. At the end of each experimental interview one of the research team (who was not an interviewer) gave the mother a questionnaire which asked about her perceptions of the interview and her feelings about it. When the questionnaire had been completed after the second experimental interview, the mother was encouraged to make free comments contrasting the two approaches and whenever possible expressing a preference.

Training of interviewers

Before the experimental study started there was an intensive period of training for the two interviewers. First, they both calibrated their own natural technique by undertaking a video and audiotape recorded interview with a mother of a newly-referred child patient. The pattern of techniques they used was then

compared with a constructed ideal profile for each of the four experimental styles so that each interviewer could determine how their natural style needed to be modified in order to fulfil the study criteria.

The interviewers then practised each of the four experimental styles by means of role play interviews with colleagues. The filming and recording procedures were adapted for these interviews in order to give as rapid as possible feedback on those techniques crucial to the style being followed. The experimental study proper began only when both interviewers were thoroughly comfortable and at ease with the styles and were using them in a satisfactory fashion.

Results

Style differences on fact-oriented techniques

Table III summarizes the differences in fact-oriented techniques which were found between styles. All the differences were large, statistically significant and in the intended direction, i.e. that the usage of these techniques should be greater in the structured and systematic exploratory styles than in either the active psychotherapy or sounding board styles. Thus, in the former two styles the interviewers had a higher number of floorholdings, asked three or four times as many closed questions, first raised new symptoms ten times as often, first raised new family topics 5 to 10 times as often, used considerably more probes per topic, and more often asked for detailed descriptions. As intended, the structured and systematic exploratory styles were much more active, directive and probing than the other two styles. It had proved possible to utilize radically different interview styles and maintain their consistency across a heterogeneous range of informants. Moreover, there were no significant differences between the two

experimental interviewers or between first and second interviews on any of these fact-oriented techniques.

On the other hand, the interviewers were to a substantial extent influenced by the characteristics of the mothers they interviewed. This was shown by the finding that there were significant product moment correlations within pairs for both floorholdings ($r = .80$ within systematic exploratory-active psychotherapy pairs and $.59$ within structured-sounding board pairs) and number of closed questions ($r = .72$ in the former pairings and $.68$ in the latter). Interviewers remained highly consistent in their use of styles (as shown by the analysis of various findings) but nevertheless some mothers demanded more use of questions and interventions than did others. Interviewers needed to be and were flexible and responsive to the needs of particular informants but this did not interfere with the maintenance of clearly differentiated styles.

Style differences on feeling-oriented techniques

Table IV summarizes the differences in feeling-oriented techniques which were found between styles. In this case the key comparison is between the systematic exploratory and active psychotherapy styles, where the use of feeling-oriented techniques should be high, and the structured and sounding board styles where they should be low. Again, the differences were generally large, statistically significant and in the intended direction. Thus, in the former two styles the interviewers were twice as likely to respond to feeling cues, used fewer closed questions, and gave twice as many requests for feelings, interpretations and expressions of sympathy.

One additional item, requests for self-disclosures,

TABLE III
Style differences on fact-oriented techniques

Techniques	Styles				Analysis of variance (A+B vs C+D; df 1, 16)	
	A Structured	B Systematic expl.	C Act. psychoth.	D Sounding board	F ratio	P
No. floorholdings (per 60 mins)	154 (62)	160 (50)	100 (48)	83 (39)	68.62	< .0001
No. closed questions (per 60 mins)	62 (29)	73 (31)	15 (12)	19 (11)	110.70	< .0001
No. open questions (per 60 mins)	27 (13)	27 (13)	15 (11)	17 (13)	24.06	< .0002
No. symptoms first raised by interviewer	5.6 (2.6)	5.3 (1.8)	0.6 (1.0)	0.2 (0.4)	104.08	< .0001
No. family topics first raised by interviewer	3.8 (1.9)	4.9 (2.6)	0.8 (0.9)	0.5 (0.9)	60.00	< .0001
No. probes per child symptom	8.3 (3.4)	9.3 (3.4)	4.5 (2.1)	3.3 (2.2)	52.12	< .0001
No. requests for detailed descriptions	6.1 (4.2)	3.7 (2.7)	2.6 (2.8)	4.1 (3.2)	4.44	< .05

i.e. emotionally laden factual information, was included in the table because of its relevance to the eliciting of feelings. Its use should have been (and was) greater in the active questioning styles because it constituted questioning on factual information, but it might influence the expression of feelings.*

* We did not know at the start of the experimental study whether or not it would, because this was a measure added after the naturalistic study as a direct result of that study's findings.

Unlike the situation with fact-oriented techniques some differences between the experimental interviewers were found with respect to feeling-oriented techniques (see Table V). Especially in the structured and systematic exploratory styles, interviewer A made more requests for feelings/expressions of sympathy/interpretations whereas interviewer B made more requests for self-disclosures. Interviewer B used a higher proportion of open questions but, except in the structured style, the two did not differ in the proportion of feelings responded to.

TABLE IV
Style differences on feeling-oriented techniques

Techniques	Styles				Analysis of variance (B+C vs A+D; df 1, 16)	
	A Structured	B Systematic expl.	C Act. psychoth.	D Sounding board	F ratio	P
% Closed questions	45 (11)	38 (11)	13 (7)	22 (10)	8.09	< .012
Ratio open:closed questions	.38 (.10)	.43 (.13)	1.23 (.89)	1.07 (.72)	0.53	ns
% Feelings responded to	19 (15)	38 (12)	62 (15)	29 (18)	24.08	< .0002
Requests for feelings (a)	0.4 (0.5)	2.2 (2.8)	4.3 (2.9)	0.4 (0.7)	22.14	< .0003
Interpretations (b)	1.2 (1.9)	3.8 (2.4)	9.9 (3.9)	1.4 (1.6)	70.83	< .0001
Expressions of sympathy (c)	5.5 (4.6)	10.1 (6.9)	14.8 (6.8)	5.3 (3.7)	18.94	< .0005
Any of a, b or c	13 (9)	27 (20)	44 (16)	14 (9)	42.67	< .0001
Requests for self disclosure (per 60 mins)	11.6 (7.6)	15.7 (6.3)	7.4 (4.7)	5.8 (4.8)	3.29	< .09

TABLE V
Interviewer differences on feeling-oriented techniques

Technique	Inter-viewer	Styles				Analysis of variance			
		A Structured	B Systematic expl.	C Act. psychoth.	D Sounding board	Between interviewers (df 1, 16)	P	Within interviewers between styles (B+C vs A+D; df 1, 16)	P
% Open questions	A	15.2 (4.4)	11.7 (3.5)	12.2 (1.0)	16.2 (7.7)	17.46	< .0008	4.25	< .06
	B	18.5 (4.5)	22.8 (3.5)	17.2 (6.9)	21.2 (8.0)				
% Feelings responded to	A	28.5 (14.8)	39.7 (10.6)	58.3 (9.6)	32.3 (10.7)	2.68	N.S.	13.53	< .002
	B	9.0 (8.1)	36.2 (14.1)	66.2 (19.0)	25.7 (24.3)				
Requests for feelings + interpretations + expr. symp.	A	20.7 (6.5)	41.5 (20.7)	45.5 (11.7)	18.8 (7.5)	40.57	< .0001	24.08	< .0002
	B	5.8 (4.5)	13.2 (2.9)	37.3 (19.5)	9.0 (8.6)				
Requests for self-disclosures	A	6.3 (3.2)	11.8 (6.0)	8.3 (4.9)	6.0 (2.6)	12.11	< .003	5.94	< .03
	B	16.8 (7.1)	19.5 (4.0)	6.5 (4.7)	5.5 (6.7)				

The net effect of these differences was that for interviewer A the structured style included too many feeling-oriented techniques and for interviewer B the systematic exploratory style included too few. Because of unavoidable delays in data processing this was not appreciated until well into the experimental interviewing with the result that they could not be fully corrected. The difference needs to be taken into account in data analysis but in spite of some differences in threshold it is evident that both interviewers maintained fairly consistent between-style differences. However, there was a number of interviews by both interviewers in which the style actually used departed from that specified. For some analyses these interviews were excluded in order to determine if their inclusion affected the results.

Style differences on non-verbal features

Table VI summarizes the style differences on various non-verbal measures. These were not part of the definitions of style and many of the differences were non-significant. However, there was a tendency for interviewers to provide more encouragement to mothers to continue talking, by smiling, head nods and vocal listening responses, in the two active feeling-oriented techniques. The interviewers differed somewhat in their pattern of non-verbal encouragements (interviewer A used significantly more non-verbal responses but significantly less smiles while listening) but not in their overall level of encouragement. This suggests that although they changed their technique according to prescription they nevertheless retained features of their specific personal style.

Discussion

The clinical interview is the diagnostic and thera-

peutic tool-in-trade of all professionals working in the field of psychiatric disorders. Accordingly it is important to develop and test the most effective clinical interviewing techniques, yet very little systematic research has been undertaken in this area; almost all research into the effects of different interview techniques and styles has been concerned with interviews in non-clinical settings and with purposes rather different from those in clinical psychiatry (Cox and Rutter, 1977). One reason may be the fear that such research would adversely affect clinical work or that clinical necessities would make an adequate research design impractical or unethical. Our experience indicates that neither need occur.

At the time the experimental study was undertaken, the usual waiting time in the clinic was about 6 weeks for non-emergency or non-urgent referrals, from the time of initial referral to the time of the diagnostic interview which was immediately followed by whatever therapeutic intervention was required. It was the practice to offer parents the choice of an interim consultation with a social worker during this waiting period. For parents who took up this offer, there were, thus, two initial interviews—the interim consultation and the later interview with the psychiatrist. The experimental design took up the opportunities presented by this waiting period by offering the first experimental interview immediately after referral, with the second experimental interview a fortnight later leading directly into therapy.

The main difference from the clinical practice of waiting list interviews was that the research interviewers were not usually involved in the later therapeutic interviews. This meant that the family's impetus to engage therapy might have been impaired by changes in interviewer. In fact this did not seem to

TABLE VI
Style differences on non-verbal features

	Styles				Analysis of variance (A+D vs B+C; df 1, 16)	
	A Structured	B Systematic expl.	C Act. psychoth.	D Sounding board	t	P
Non-verbal features	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)		
Smiles while talking	0.6 (0.8)	1.8 (2.0)	1.8 (1.6)	0.3 (0.5)	3.52	< .01
Smiles while listening	5.6 (5.3)	8.1 (4.1)	8.2 (6.0)	4.2 (3.1)	2.41	< .05
Head nods while talking	15.8 (8.2)	14.1 (6.0)	17.6 (10.9)	11.1 (6.4)		N.S.
Head nods while listening	35.3 (12.1)	47.5 (10.9)	54.8 (15.7)	45.4 (16.3)	2.60	< .02
Vocal listening responses	56.6 (17.5)	64.9 (12.3)	67.6 (17.1)	51.8 (20.6)		N.S.

occur. We checked on the possibility by noting early lapses or drop-out from therapy. It was found that these were no more frequent in the experimental sample than in a randomly selected sample of other clinic cases; in fact they were marginally less frequent.

A further concern might be that because the research interviews were with the mother on her own, it might be more difficult to initiate therapy with conjoint marital interviews or conjoint family interviews. In practice, this did not appear to be a major obstacle and certainly a wide variety of treatments were subsequently employed. Other research (Dare *et al.*, 1980) has shown that although it may be advisable to be cautious about early changes in therapeutic approach, nevertheless the form of the initial assessment need not predetermine the form of therapeutic intervention.

In undertaking an experimental study in the course of ordinary clinic practice in a busy out-patients' department, a high degree of co-operation and close liaison between researchers and clinicians was essential. If difficulties were to be avoided, attention to detail and an alertness for potential personal anxieties was crucial. Given that, it proved readily possible to integrate research and clinical needs with only occasional problems.

From the research point of view, the most fundamental concern was whether it would be possible for two experienced clinicians with well developed and rather different styles of their own to learn to use four very disparate experimental styles in a way that both felt natural to them and appeared so to the people whom they were interviewing. Our experience showed that it was possible. The research findings indicated that both interviewers were successful in adopting four styles which were measurably very different from each other. The differentiation between styles and the lack of difference between the two interviewers was most successful in the case of the fact-oriented techniques. The differentiation between styles was also good in the case of feeling-oriented techniques but the situation was complicated by some continuing differences between interviewers.

It was not that either interviewer failed to use four very different styles; to the contrary the findings showed that both succeeded well in this. Rather the problem lay in the fact that the two interviewers were not ideally calibrated with each other. Thus, although both differed between styles in their use of feeling-oriented techniques, one interviewer had a level of usage which was generally higher than the other. The main reason for this probably lay in the difficulties in providing the interviewers with feed-back on the changes in style required to ensure good comparability. Success in getting interviewers to adopt

markedly contrasting styles seemed to depend on the combination of the use of role-playing, precise definition on what was required, the opportunity to view interviews on video-tape and analyse them in some detail, together with continuing feedback after each interview on how successfully styles were being followed. We are impressed by the value of both video-tapes and role-playing as a means of teaching interviewing skills.

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References

- BALINT, M. & BALINT, E. (1961) *Psychotherapeutic Techniques in Medicine*. London: Tavistock.
- BROWN, G. W. & RUTTER, M. (1966) The measurement of family activities and relationships: a methodological study. *Human Relations*, **19**, 241-63.
- COX, A. & RUTTER, M. (1977) Diagnostic appraisal and interviewing. In *Child Psychiatry: Modern Approaches* (eds. M. Rutter and L. Hersov). Oxford: Blackwell Scientific.
- HOLBROOK, D. & RUTTER, M. (1981) Psychiatric interviewing techniques: VI. Experimental study; eliciting feelings. *British Journal of Psychiatry*, (in press).
- HOPKINSON, K. & RUTTER, M. (1981) Psychiatric interviewing techniques: II. Naturalistic study; eliciting factual information. *British Journal of Psychiatry*, **138**, 283-91.
- RUTTER, M. & HOLBROOK, D. (1981) Psychiatric interviewing techniques: V. Experimental study; eliciting factual information. *British Journal of Psychiatry*, (in press).
- YULE, B. & QUINTON, D. (1977) Bias resulting from missing information: some epidemiological findings. *British Journal of Preventive and Social Medicine*, **31**, 131-6.
- DARE, J., HEMSLEY, R. & COX, A. A comparison of individual and family assessments. (In preparation).

- FINESINGER, J. (1948) Psychiatric interviewing. 1. Some principles and procedures in insight therapy. *American Journal of Psychiatry*, **105**, 187–95.
- GILL, M., NEWMAN, R. & REDLICH, F. C. (1954) *The Initial Interview in Psychiatric practice*. New York: International Universities Press.
- HOPKINSON, K., COX, A. & RUTTER, M. (1981) Psychiatric interviewing techniques: III. Naturalistic study; eliciting feelings. *British Journal of Psychiatry*, **138**, 406–15.
- QUINTON, D., RUTTER, M. & ROWLANDS, O. (1976) An evaluation of an interview assessment of marriage. *Psychological Medicine*, **6**, 577–86.
- RUTTER M. & BROWN, G. W. (1966) The reliability and validity of measures of family life and relationships in families containing a psychiatric patient. *Social Psychiatry*, **1**, 38–53.
- & COX, A. (1981) Psychiatric interviewing techniques: I. Methods and measures. *British Journal of Psychiatry*, **138**, 273–82.
- WING, J. K., BIRLEY, J. L. T., COOPER, J. E., GRAHAM, P. & ISAACS, A. D. (1967) Reliability of a procedure for measuring and classifying 'present psychiatric state'. *British Journal of Psychiatry*, **113**, 499–515.
- NIXON, J. N., MANN, S. A. & LEFF, J. P. (1977) Reliability of the PSE (ninth edition) used in a population study. *Psychological Medicine*, **7**, 505–16.

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