Archiv für Psychiatrie und Nervenkrankheiten Archives of Psychiatry and Neurological Sciences © Springer-Verlag 1983

Parental Rearing Behaviour and Personality Characteristics of Depressed Patients*

C. Perris, M. Eisemann, U. Ericsson, L. von Knorring, and H. Perris Department of Psychiatry, Umeå University, S-90185 Umeå, Sweden

Summary. Within the framework of a large and ongoing study of depression in its biological, clinical, psychological and social aspects, 141 patients of both sexes in the age range 21 to 65 years participated in a study of parental rearing practices and personality characteristics. The perceived parental rearing behaviour was assessed by means of a specially constructed inventory (EMBU), and the personality characteristics by means of a Swedish personality inventory, the KSP, which had previously been shown to measure relatively stable personality characteristics.

Several important correlations emerged between parental rearing practices and personality traits. In particular, power assertive practices and psychological types of discipline (shaming, guilt-engendering) showed significant correlations with aspects of aggression and significant negative correlations with socialization. There was a good agreement between male and female patients in the judgement of the rearing behaviour of their fathers. However, female patients scored their mother as more abusive, whereas male patients scored them as more over-protective. On the whole, the rearing practices of the mothers were judged more negatively than those of the fathers. The findings of this study appear to be consistent with earlier results reported by other authors.

Key words: Rearing practices in depressed patients – Rearing behaviour and socialization – Parental rearing attitudes and traits of aggression – EMBU – KSP

Zusammenfassung. Im Rahmen einer Depressionsstudie wurde bei 141 Patienten nach Abklingen der depressiven Phase der Zusammenhang zwischen dem Erziehungsstil der Eltern und den Persönlichkeitseigenschaften der Patienten untersucht. Der Erziehungsstil wurde von den Patienten retrospektiv mit dem EMBU-Fragebogen beurteilt, während die Persönlichkeit mittels dem schwedischen Persönlichkeitsfragebogen KSP erfaßt wurde.

Offprint requests to: C. Perris at the above address

^{*}Supported (in part) by grants from the Swedish Medical Research Council (grant nos. 21X-5244 and 21P-5740)

Es ergaben sich mehrere bedeutsame Korrelationen zwischen elterlichen Erziehungsstilen und Persönlichkeitszügen. Insbesondere zeigten gewaltbejahende Praktiken und psychologische Disziplinierungsmaßnahmen (zum Schämen bringen, Schuldgefühle erzeugend) signifikante Korrelationen zu Aspekten der Aggression und signifikante negative Korrelationen zur Sozialisationsskala. Männliche und weibliche Patienten beurteilten das Erziehungsverhalten der Väter ähnlich. Die Mütter wurden dagegen von den weiblichen Patienten eher als mißhandelnd, von den männlichen Patienten dagegen eher als übermäßig beschützend eingestuft.

Im ganzen gesehen wurde das Erziehungsverhalten der Mütter im Vergleich zu dem der Väter, negativer beurteilt. Die Ergebnisse dieser Untersuchung stimmen mit früheren Untersuchungen anderer Verfasser überein.

Schlüsselwörter: Erziehungsstile bei deprimierten Patienten – Erziehungsverhalten und Sozialisation – Elterliches Erziehungsverhalten und aggressive Persönlichkeit – EMBU – KSP

Introduction

The habitual personality characteristics of a subject are generally regarded as one of the most powerful factors which might not only predispose the subject to a psychopathological breakdown, but might also contribute to the development of symptomatology and to the shaping of the course of psychiatric illnesses. Although several studies suggest that a sizeable part of the variation of interindividual characteristics might be inherited (Eysenck 1956; Eysenck 1976; Insel 1974; Salzana and Rao 1976; Horn et al. 1976; Floderus-Myrhed et al. 1980) a current opinion is that a large part of this variance is due to psychological and social factors, such as the interaction of the child with his parents, the interaction with peers, and the internalization of social roles and social values (Erikson 1950). In this last context, attention has been paid particularly to the impact on personality development of various behaviour patterns on the part of parents towards their children (Hoffman 1970; Newman and Newman 1975; Murphy and Moriarty 1976; Albright 1978; Shaw 1978; Nettelbladt et al. 1981). There have been several attempts to demonstrate that particular dimensions of parental rearing behaviour could produce particular personality characteristics in the children (for a recent review see Albright 1978). Some important issues in the complex of relationships between parental rearing behaviour and the personality development of the child have been the relations between parental attitudes and dependency and aggression in the child, and the consequences of restrictive or permissive parental discipline upon the character of the child. Sears et al. (1953) found a positive correlation between maternal punitiveness and dependency in boys, and a negative correlation with dependency in girls. They also found a positive correlation between severity of maternal punitiveness for aggression and overt aggression as displayed by the boys. In girls the relation was negative. Similar results have been reported earlier by Hollenberg and Sperry (1951) while a further verification was published later by Becker et al. (1962). Watson (1957) found that greater freedom in the home created greater independence in the children. In this study, a permissive parental attitude was positively correlated with high creativity and achievement orientation, at the same time as it produced less hostility in the child. Similar results were obtained by Becker (1964) who found that warmth and permissiveness result in an active, socially other-oriented, creative, independent and friendly personality with a low level of hostility. Parental hostility and restrictiveness, on the other hand, favour neurotic problems, and a socially withdrawn personality, whereas hostility and permissiveness result in delinquency, non-compliance and maximum aggression. The results obtained by Baumrind and Black (1967) indicate the same in that they found that parental demand of self-control and the encouragement of independent decision-making promoted competence and responsible, independent behaviour in pre-school children.

An important innovation in studies of the possible relationships between parental attitudes towards, or practice of discipline, and the successive behaviour of the child, has been introduced by Ausubel and his associates (Ausubel et al. 1954; Ausubel 1958) who stressed that the child's perception of his home life, i.e. of the situation, was more important than the actual situation itself for the development of particular personality characteristics. Ausubel introduced the concept of "satellization" to explain personality organization and ego development. Satellization denoted a form of identification occurring in early childhood in children who perceive themselves as accepted and intrinsically valued by their parents. In contrast, "non-satellization" is conceived of as the absence of identification under conditions of perceived rejection. Non-satellization is hypothesized to be associated with a high level of anxiety, rigidity in new learning situations, a strong need for achievement, and low self-esteem. Those assumptions were later confirmed to a large extent by Willenson (1960) and Serot and Teevan (1961).

In a previous article (Perris et al. 1980) we reported on the development of a new inventory (EMBU) for assessing memories of parental rearing practices and its application in healthy controls. In a successive paper (Jacobsson et al. 1980) we showed that parental rearing behaviour as it was perceived by the respondents correlated significantly in a meaningful way with personality characteristics. For example, we reported that one of the EMBU factors, comprised of controlling, guilt-engendendering, and performance-oriented rearing behaviour on the part of the mothers correlated positively with neurotic self-assertion and passive dependency. Several other correlations were also found for single subscales of the EMBU, and such personality variables as defence of status, aggression, exhibition, etc. as measured by means of a Swedish inventory aimed at the assessment of psychogenic needs according to the theory of Murray (1938).

There are a few studies, Jacobsson et al. (1975), Raskin et al. (1971), Parker (1979), which suggest a higher frequency of perceived disturbing parental rearing behaviour in depressed than in normal adults. Jacobsson et al., in fact suggest that childhood deprivation in adult depressives should be understood not only as the loss of or separation from a parent during childhood, but also as the lack, loss or absence of an emotionally sustaining relationship prior to adolescence. If this is so, then it could be hypothesized that particular rearing practices on the part of parents might contribute to the shaping of personality characteristics which could be relevant for the development of a depressive episode. To contribute to the clarification of this issue, the present investigation was planned with the aim

	21-30	31-40	41-50	51-60	61-	Total	
Male	10	8	7	21	7	53	
Female	10	28	15	22	13	88	

43

22

20

141

Table 1. Age and sex distribution of the series

 $\chi^2 = 7.62$, df. = 4: NS

20

Total

Table 2. Distribution of the series in the diagnostic subgroups

36

	Unipolar	Bipolar	Neurotic- reactive	Unspecified
Male	18	7	16	12
Female	29	14	23	22
Total	47	21	39	34

 $\chi^2 = 0.44$, df. = 3: NS

of seeking possible correlations between parental rearing behaviour as perceived by our patients, and personality characteristics in a series of depressed patients. We have limited the scope of this report to relations between rearing practices and personality traits since a study of possible differences in the perception of parental rearing behaviour in various subgroups of depressed patients in comparison with healthy controls will be the subject of a later article.

Patients and Methods

a) Patients. Depressed patients of both sexes consecutively admitted to the Department of Psychiatry, Umeå University participate, if they consent, in a large study of depression in its biological, clinical psychological and social aspects, which has been in progress since 1976. As a part of this study, patients also participate in a study of parental rearing practices and of personality characteristics (see below). In the initial phase of the study, the rearing practices of the parents were assessed by means of a semistructured interview. Only later, when the EMBU had been developed, could a more systematic study begin. For this reason only 141 of the 209 patients who have entered the study so far are included in this report. The series thus comprises 53 male and 88 female patients in the age range 21 to 65 years. The patients were classified, by two independent psychiatrists into bipolar and unipolar, according to the definitions given by Perris (1973), neurotic-reactive, according to the definition given by d'Elia et al. (1974), and "unspecified", i.e. those patients who did not meet the criteria for inclusion in any of the groups named before. The composition of the series as concerns sex and age distribution is shown in Table 1, and concerning the distribution into the diagnostic subgroups in Table 2. No statistically significant differences emerged, either as concerns the age of the diagnostic distribution in the two sexes.

b) Assessment of Parental Rearing Practices. Memories of the perceived rearing practices of the parents were assessed by means of the EMBU developed by our group. The EMBU, now available in different languages, and currently used in various countries is an 81-item questionnaire

Table 3. EMBU scores (mean values	and standard erro	or of the mean) given to fathe	rs and
mothers from patients in the whole	series		

EMBU scales	Fathers		Mothers	
	$\overline{\overline{x}}$	S	\overline{X}	S
Abusive	7.4	0.2	7.7	0.1
Depriving	9.3	0.2	9.6	0.2
Punitive	10.9	0.4	11.4	0.3
Shaming	7.0	0.2	7.5	0.2
Rejecting	10.7	0.3	11.6	0.2ª
Over-protective	14.2	0.3	15.5	0.2 ^b
Over-involved	14.8	0.3	16.5	0.3 ^b
Tolerant	18.0	0.2	17.5	0.2
Affectionate	13.5	0.4	12.4	0.3ª
Performance oriented	9.1	0.3	9.6	0.2
Guilt engendering	8.9	0.3	10.1	0.2 ^b
Stimulating	14.1	0.4	13.1	0.3 ^b
Favouring siblings	5.9	0.2	6.3	0.2
Favouring patient	5.9	0.2	6.4	0.2

^a P < 0.05; ^b P < 0.01 (Mann-Whitney-*U*-test)

to be answered by the subject according to a 4-point scale, separetely for the mother and for the father. The items are grouped in 14 subscales, a 15th ("unspecified") included in an earlier version has been eliminated as a separate subscale and the items comprised in it have been distributed to the other scales according to levels of correlation. The 14 subscales are as follows: abusive, depriving, punitive, shaming, rejecting, over-protective, over-involved, tolerant, affectionate, performance oriented, guilt-engendering, stimulating, favouring siblings and favouring subject. The scoring system is constructed so that a high score always corresponds to a high level of the denomination of the scale under scrutiny. Further details concerning the EMBU are given in the original paper by Perris et al. (1980), and the results of a new factor analysis study will be presented in a forthcoming article.

The EMBU was introduced to each patient by one of the members of to research team who had already had the opportunity of establishing a relationship in the course of previous interviews, and the patients were asked to complete the form by themselves. Obviously, they could ask at any time for supplementary information and explanations. Every patient completed the EMBU after recovery from the depressive episode or, at least when they had improved so much as to be on the way to being discharged from hospital.

C) Assessment of Personality Characteristics. Personality characteristics were assessed concurrently with the parental rearing practices by means of the KSP, a Swedish personality inventory developed by Schalling and her co-workers (Schalling 1970, 1978; Schalling and Åsberg 1979). It is an inventory comprised of 135 items which are grouped in 15 subscales which refer to various aspects of personality. The subscales are: somatic anxiety, psychic anxiety, muscular tension, social desirability, impulsiveness, monotony avoidance, distance preference, psychasthenia, socialization, indirect aggression, verbal aggression, irritability, suspicion, guilt and inhibition of aggression. In addition, an "aggression factor" is obtained by the combination of the variables: indirect and verbal aggression and irritability, and a hostility factor is obtained by combining the subscales suspicion and guilt. The KSP is assumed to measure the relatively enduring personality characteristics (traits) of an individual. An earlier study by our group (Perris et al. 1979) confirmed that this was the case in a population of depressed patients who were investigated when ill, and then again when they had recovered

Table 4. The whole series-fathers. Correlations between EMBU and KSP scores^a

EMBU scales	KSP sca	les					
	SA	PA	MT	SD	I	M	D
Abusive	0	0	0.10	-0.19**	0.10	0.02	0.02
Depriving	0.02	0.05	0.10	-0.24***	-0.05	0.06	-0.01
Punitive	0.17**	0.08	0.21***	-0.25***	-0.01	0.05	0
Shaming	0.21***	0.14*	0.25***	-0.19***	-0.07	-0.01	0
Rejecting	-0.04	-0.10	0.01	-0.12****	0.03	0.12****	-0.04
Over-protective	-0.10	-0.12****	-0.06	-0.11****	0.14	0.12****	-0.14*
Over-involved	0.20***	0.14****	0.24***	-0.11****	0.02	0.01	0.06
Tolerant	0.05	0.12	0.02	-0.07	-0.12***	*-0.07	-0.01
Affectionate	0.21***	0.19***	0.17**	0.02	-0.11	-0.08	0.14*
Performance oriented	-0.08	-0.11	-0.06	-0.13****	-0.02	0.18**	-0.06
Guilt engendering	0.20***	0.16*	0.21***	-0.20***	-0.07	0.08	0.09
Stimulating	0.16*	0.21***	0.14*	0.04	-0.17**	-0.12****	0.16*
Favouring siblings	0.14*	0.13****	0.23***	-0.20***	-0.02	-0.01	-0.08
Favouring patient	0.07	-0.01	0.12****	0.02	0.13***	* 0.14****	-0.05

^{*} P< 0.05; ** P< 0.01; *** P< 0.001; **** P< 0.10 > 0.05

SA – somatic anxiety

PA – psychic anxiety

MT-muscular tension

SD-social desirability

I—impulsivity

M-monotomy avoidance

D-distance preference

Ps – psychoasthenia

So-socialization

Ind ag-indirect aggression Verb ag-verbal aggression

Irr-irritability

Table 5. The whole series-mothers. Correlations between EMBU and KSP scores^a

EMBU scales	KSP sca	ales					
	SA	PA	MT	SD ·	ΙM	D	
Abusive	0.02	0.05	0.12****	0.04	0.15	0.02	-0.01
Depriving	0.06	0.09	0.11	-0.11	0.02	0.17*	0.01
Punitive	0.18*	0.13****	0.17*	-0.07	0.10	0.10	-0.07
Shaming	0.22**	0.21**	0.25**	0.05	0.05	0.06	0
Rejecting	-0.10	-0.09	-0.12****	-0.01	0.01	0.12****	0.10
Over-protective	-0.10	-0.12	-0.06	-0.11	0.07	0.14*	-0.12****
Over-involved	0.18*	0.24**	0.20**	0.01	0.10	0.05	0.07
Tolerant	0.11	0.14*	0.03	0.02	-0.16*	-0.10	-0.06
Affectionate	0.22**	0.17*	0.25**	-0.06	-0.07	-0.02	0.01
Performance oriented	-0.08	-0.07	-0.10	0.03	-0.01	0.12****	-0.04
Guilt engendering	0.14*	0.16*	0.16*	-0.10	0	0.10	0.11
Stimulating	0.16*	0.17*	0.15*	-0.08	-0.10	-0.06	0.13****
Favouring siblings	0.20*	0.17*	0.24*	-0.03	0.02	0.05	-0.06
Favouring patient	0.09	0.04	0.12****	0.04	0.15*	0.06	-0.01

P< 0.05; ** P< 0.01; *** P< 0.001; **** P< 0.10 > 0.05

^a The abbreviations of the KSP scales are explained in Table 4

Ps	So	Ind ag	Verb ag	Irr	Susp	Guilt	Inh	Agg fact	Host fact
-0.06	-0.08	0.04	0.02	0.01	-0.01	0.07	-0.12****	0.14	-0.02
-0.04	-0.13	0.08	0.09	0.01	0.02	0.08	-0.14*	0.11	0.01
0.01	0.28***	0.15*	0.13****	0.05	0.07	0.09	-0.18**	0.20***	0.13****
0.03	-0.29	0.13****	0.02	0.08	0.06	0.13****	-0.12****	0.14*	0.13****
-0.22***	0.06	0.07	0.11	-0.06	0.04	0.06	-0.18**	0.08	0
-0.20***	0.13****	-0.03	0.10	-0.09	0	0.07	-0.14*	0.12****	-0.05
0.02	-0.25***	0.02	0.06	0.06	0.12****	0	-0.06	0.15*	0.08
0.15*	-0.10	-0.04	-0.14*	0.02	-0.08	-0.01	0.14*	-0.11	0.01
0.23***	-0.26***	0.03	-0.06	0.17**	0.04	-0.01	0.13****	0.03	0.11
-0.13**	0.03	0	0.07	-0.05	0	-0.02	-0.15*	0.04	-0.04
0.08	-0.32	0.11	0.05	0.09	0.14*	0.10	-0.11	0.18**	0.13****
0.27	-0.29	0.07	-0.04	0.10	0.07	0	0.18**	0.02	0.10
0.02	-0.31	0.03	-0.04	0	0.06	0.13****	0.02	0.09	0.15*
-0.06	-0.13****	-0.06	-0.06	0.02	0.01	0.12****	-0.12****	0.06	0.13****

Susp – suspicion
Guilt – guilt
Inh – inhibition of aggression

Agg fact – aggression factor Host fact – hostility factor

Ps	So	Ind ag	Verb ag	Irr	Susp	Guilt	Inh	Agg fact	Host fact
0.05	-0.16*	-0.02	-0.13****	0.11	0.13****	0.04	0.06	0.09	0.08
0.02	-0.24**	0.06	0.12	0.04	0.08	0.06	-0.14*	0.15*	0.09
0.10	0.47***	0.04	0.03	0.14*	0.16*	-0.07	-0.05	0.15*	0.17*
0.18*	-0.53***	0.07	0.02	0.16*	0.19**	0.07	0.04	0.13****	0.18**
-0.20**	0.11	0.17*	0.11	-0.06	0.05	0.16*	-0.10	0.09	0.09
-0.17*	0.08	0.03	0.12****	-0.11	0.13****	0.04	0.05	0.20**	0.07
0.12	0.41***	0.05	0.09	0.16*	0.27***	0.01	0	0.20**	0.17*
0.14*	0.10	-0.08	-0.17	0.02	-0.17*	-0.10	0.06	-0.08	-0.09
0.25**	-0.32***	-0.03	-0.08	0.18**	0.04	-0.06	0.04	-0.02	0.11
-0.10	0.10	0	0.06	-0.04	-0.05	-0.05	-0.07	0.01	-0.06
0.12	0.50***	0.14	0.06	0.19**	0.22**	0.16*	0.01	0.20**	0.24**
0.25**	-0.32***	-0.03	-0.10	0.12****	0.10	-0.04	0.14*	-0.04	0.05
0.10	-0.45***	-0.03	-0.11	0.10	0.15*	0.10	0.12***	** 0.03	0.20**
-0.03	-0.14*	0.10	-0.02	0.02	0.01	0.12****	-0.12***	* 0.06	0.13****

Table 6. Correlations between some negative rearing practices and personality traits of socialization and aggression in male patients

		Sociali- zatìon	Indirect aggression	Verbal aggression	Irri- tability	Suspicion	Guilt	Inhib of aggression	Aggression factor	Hostility factor
Abusive	Father	-0.26*	-0.01	0.22	-0.08	90.0	0.09	-0.25*	0.26*	0.07
	Mother	-0.10	-0.20	-0.04	0.16	0.24*	0.28*	0.01	0.14	0.24*
Depriving	Father	-0.24*	0.08	0.24*	90.0-	0.10	0.19	-0.28*	0.20	80.0
	Mother	-0.29*	0.11	0.23*	-0.01	0.02	0.18	-0.32*	0.18	-0.01
Punitive	Father	-0.44***	0.19	0.27	-0.08	0.19	0	-0.27*	0.27*	0.14
	Mother	-0.41***	0.03	0.22	0.09	0.03	0	-0.09	0.15	-0.03
Shaming	Father	-0.43***	0.13	0.15	-0.03	0.16	0.12	-0.32*	0.24*	0.17
	Mother	-0.51***	0.14	0.21	0.07	0.16	0.01	-0.20	0.19	0.01
Rejecting	Father	-0.11	-0.02	0.26*	-0.12	0.15	0.03	-0.14	0.12	60.0
	Mother	-0.01	0.02	0.16	-0.10	0.14	0.15	-0.05	0.17	0.18
* P< 0.05;	* P< 0.05; ** P< 0.01; *** P<	*** P< 0.001		Liver to the state of the state						

Table 7. Correlations between some negative rearing practices and personality traits of socialization and aggression in female patients

		Sociali- zation	Indirect aggression	Verbal aggression	Irri- tability	Suspicion	Guil	Inhib of aggression	Aggression factor	Hostility factor
F. B.	Father	0.04	90.0	-0.11	80.0	90.0—	0.05	-0.05	0.07	-0.09
M	Mother	-0.18*	0.05	-0.15	0.10	90.0	-0.09	0.07	0.10	-0.04
Depriving Fa	ther	-0.06	80.0	-0.02	90.0	-0.03	0.01	-0.06	90.0	-0.04
	Mother	-0.20*	0.02	0.02	80.0	0.12	-0.02	-0.02	0.13	0.16
Fa	ther	-0.19*	0.14	0.03	0.13	0.01	0.14	-0.13	0.16	0.13
M	other	-0.49***	0.02	-0.04	0.18*	0.20*	0.10	-0.04	0.18*	0.24**
Fa	ther	-0.22*	0.13	90.0-	0.14	0	0.14	0	0.08	0.11
M	other	-0.55***	0.03	-0.06	0.22*	0.20*	0.09	0	0.12	0.24**
Rejecting Fa	Father	0.17	0.14	-0.01	-0.03	-0.03	80.0	-0.21*	0.05	-0.07
M	Mother	0.18*	0.27**	0.07	-0.04	0.01	0.17	-0.13	0.03	0.04

^{*} P < 0.05; ** P < 0.01; *** P < 0.001

from depression. The personality characteristics of a larger series of patients assessed by means of the KSP are reported elsewhere (Perris et al. 1982).

D) Statistical Analysis. Mean scores and SD for each of the subscales of the EMBU were calculated both for mothers and fathers, and for male and female patients. Mean scores for each of the KSP subscales and for the two factors were also obtained. Thereafter, correlation coefficients between each of the subscales of the EMBU and each of the subscales of the KSP were calculated using standard computer programmes (Statistical Package for the Social Sciences, SPSS) at the Umeå Computer Centre (UMDAC). Throughout, the 5% level was accepted as indicating significance.

Results

Table 3 shows the EMBU scores given to fathers and mothers from the whole series of patients. Although patients tended to score fathers and mothers rather similarly, a few significant differences did emerge. Thus, mothers were judged as more rejecting, more over-protective more over-involved and more guilt-engendering than fathers, whereas fathers were judged more affectionate and more stimulating (Mann-Whitney *U*-test).

When the responses of male and female patients were analysed separately no differences emerged between the two sexes as concerns the rearing practices of the fathers. In contrast, male patients rated their mothers more over-protective, and female patients rated their mothers more abusive. There was also a tendency amongst female patients to rate their mothers more punitive, and as favouring siblings. In Tables 4 and 5, the correlations between rearing practices and personality variables are presented separately for the fathers and the mothers. It is evident that many more significant correlations emerged than those which could be expected from chance alone. In particular, several significant correlations emerged between different kinds of rearing practice and the personality variables of anxiety, socialization, and aggression. These correlations support the hypothesis that stable personality characteristics of the parents might be an important factor in shaping their rearing practices. In almost all instances, the significant correlation coefficients are higher for mothers than fathers. This result is in agreement with previous findings by Nettelblad (1981) who found that the impact of the father on the development of the child was not as strong as the impact of the mother.

As we have reported in the introduction parental rearing practices may have a different influence on male and female offspring. That this is also the case in the present series is best illustrated by the results presented in Tables 6 and 7 which refer to the correlations between disturbing rearing practices and the variables of aggression and socialization in the personality of our patients. It can be seen that negative rearing practices are negatively correlated with socialization, especially in male subjects and that aspects of aggression are differently correlated with paternal or maternal rearing behaviour in male and female subjects.

Discussion

It might be contended that the findings of the present study cannot appropriately be used as evidence regarding the relationship between parental rearing practices

and the personality characteristics of our adult depressed patients. In fact, it could be argued that the parental attitudes perceived by the adult depressives are retrospective in nature and might vary markedly from those they held as children. It might also be suspected that depressives, albeit recovered from their depression or markedly improved might tend to judge parental attitude negatively. However, the consistence of our findings with many of the results reported in the literature seems to support the hypothesis that most of our correlations reflect a true situation. In fact, our strongest correlations between rearing practices and personality characteristics have been found concerning aspects of socialization and of aggression. In our sample, the use of power assertive techniques by parents (abusive, punative) was found to be significantly correlated with hostility and aggression, and negatively related to inhibition of aggression. Similar results have previously been reported by Anthony (1970), Chwast (1972) and Sears et al. (1953) who studied the development of aggression in children. Also, the strong negative correlations with socialization are in line with earlier results by others authors. In fact Hoffman (1970) found that when parents use loss of love as their principle disciplinary technique their children tend to be conforming, with a strong need for approval but that such "good behaviour" is associated with low internalization of moral standards. Since a low score on the variable socialization reflects a weak superego, our negative correlations between power assertive and psychological rearing practices and socialization are in line with the findings of Hoffman. The finding that shaming is positively correlated with traits of anxiety (Tables 4 and 5) is also consistent with his results. The finding that even a stimulating rearing practice is negatively correlated with socialization might seem to be inconsistent with what has been stated above concerning the relationships between enforced power and psychological pressure and the same variable. However, a stimulating rearing attitude which encourages independent decisionmaking and self-realization has to be combined with a parental demand for selfcontrol in order to promote a strong superego. Since we do not know the intercorrelations among the different rearing practices in our sample, we can only speculate that stimulating attitudes might have been combined with too high a degree of permissiveness, thus negatively influencing the trait of socialization.

Our findings concerning significant relationships between perceived parental rearing practices, and personality traits do not allow us to draw conclusions about the antecedence and consequence of the two variables under scrutiny. One could argue with equal force that the correlations are due to the fact that the parents of our patients actually behaved as perceived and thereby influenced the personality of the subjects in a given direction, or the particular personality characteristics of our patients, already present when they were children, might have elicited particular rearing practices. Furthermore, it could also be argued, that given certain personality characteristics subjects tend to perceive their parents as behaving in a given way, regardless of their actual behaviour. In particular, depressives might be suspected of selectively monitoring negative events and inaccurately attributing importance to them in a search for meaning and understanding. However, the finding that no correlations, or negative significant correlations occurred between the variables referring to parental behaviour and the variable social desirability in the KSP makes us more confident about the validity of our

results. Nettelblad (1981) has reviewed the literature, and added his own results which suggest that a differential pattern of rearing practices can occur in subjects from different social classes. We have not kept the variable social class under control in this study; however, a preliminary scrutiny of our series with regard to social class seems to suggest a high degree of homogeneity. Further results concerned with this respect will be presented in forthcoming articles.

References

Albright MJ (1978) Psychosocial aspects of development. In: Balis GU, Wurmser L, McDaniel E, Grenell RG (eds) Dimensions of behaviour. 1. The psychiatric foundations of medicine. Butterworth, London, pp 391-427

Anthony EJ (1970) The behaviour disorders of children. In: Mussen PH (ed) Carmichael's manual of child psychology, vol 2. Wiley, New York, pp 667-764

Ausubel DP (1958) Theory and problems of child development. Grune & Stratton, New York Ausubel DP, Balthazar E, Rosenthal I, Blackman L, Schpoont S, Welkowitz J (1954) Perceived parent attitudes as determinants of children's ego structure. Child Dev 25:173-183

Baumrind D, Black AE (1967) Socialization practices associated with dimensions of competence in preschool boys and girls. Child Dev 38:291-327

Becker WC (1964) Consequences of different kinds of parental discipline. In: Hoffman YL, Hoffman LW (eds) Review of child development research, vol 1. Russel Sage Foundation, New York, pp 169-208

Becker WC, Peterson DR, Luria Z, Shoemaker DJ, Hellmer LA (1962) Relations of factors derived from parent-interview ratings to behaviour problems of five-year-olds. Child Dev 33:509-535

Chwast J (1972) Sociopathic behaviour in children. In: Wolman BB (ed) Manual of child psychopathology. McGraw-Hill, New York, pp 436-445

d'Elia G, von Knorring L, Perris C (1974) Non-psychotic depressive disorders. A ten year follow-up. Acta Psychiatr Scand [Suppl] 255:173-186

Erikson EH (1950) Childhood and society. Norton, New York

Eysenck HJ (1956) The inheritance of extraversion-introversion. Acta Psychol 12:95-110

Eysenck HJ (1976) Genetic factors in personality development. In: Kaplan AR (ed) Human behaviour genetics. Thomas, Springfield, pp 198-207

Floderus-Myrhed B, Pedersen N, Rasmuson I (1980) Assessment of heritability for personality, based on a short form of the Eysenck Personality Inventory: A study of 12,898 twin pairs. Behav Gen 10:153-162

Hoffman ML (1970) Moral development. In: Mussen PH (ed) Carmichael's manual of child psychology, vol 1. Wiley, New York, pp 1061-1062

Hollenberg E, Sperry M (1951) Some antecedents of aggression and effects of frustration in doll play. Personality 1:32-43

Horn JM, Plomin R, Rosenman R (1976) Heritability of personality traits in adult male twins. Behav Gen 6:17-30

Insel PM (1974) Maternal effects in personality. Behav Gen 4:133-143

Jacobsen S, Fasman J, DiMascio A (1975) Deprivation in childhood of depressed women. J Nerv ment Dis 160:5-14

Jacobsson L, Lindström H, von Knorring L, Perris C, Perris H (1980) Perceived parental behaviour and psychogenic needs. Arch Psychiatr Nervenkr 228:21-30

Murphy LB, Moriarty AE (1976) Vulnerability, coping and growth. Yale Univ. Press, New Haven

Murray HA (1938) Exploration in personality. Oxford Univ. Press, New York

Nettelbladt P, Uddenberg N, Englesson I (1981) Sex-role patterns, paternal rearing attitudes and child development in different social classes. Acta Psychiatr Scand 64:12-24

Nettelbladt P (1981) The man and his family. Medical Dissertation Lund University

Newman BM, Newman PR (1975) Development through life: a psychosocial approach. Dorsey Press, Homewood III

- Parker G (1979) Reported parental characteristics in relation to trait depression and anxiety levels in a non-clinical group. Austr NZ J Psychiatry 13:260-264
- Perris C (1973) The heuristic value of a distinction between bipolar and unipolar affective disorders. In: Angst J (ed) Classification and prediction of outcome of depression. Schattauer, Stuttgart, pp 75-84
- Perris C, Eisemann M, Ericsson U, Jacobsson L, von Knorring L, Perris H (1979) Variations in self-assessment of personality characteristics in depressed patients with special reference to aspects of aggression. Psychiatria Clin 12:209-215
- Perris C, Jacobsson L, Lindström H, von Knorring L, Perris H (1980) Development of a new inventory for assessing memories of parental rearing behaviour. Acta Psychiatr Scand 61: 265-274
- Perris C, Eisemann M, Ericsson U, von Knorring L, Perris H (1983) Patterns of aggression in the personality structure of depressed patients. Arch Psychiatr Nervenkr 233:
- Raskin A, Boothe HH, Reating NA, Shulterbrandt JG (1971) Factor analyses of normal and depressed patient's memories of parental behaviour. Psychol Rep 29:871-879
- Salzano FM, Rao DC (1976) Path analysis of aptitude, personality and achievement scores in Brazilian twins. Behav Gen 6:461-466
- Schalling D (1970) Contribution to the validation of some personality concepts. Rep Dept Psychol Univerity of Stockholm, Suppl 1
- Schalling D (1978) Psychopathy-related personality variables and the psychophysiology of socialization. In: Hare RD, Schalling D (eds) Psychopathic behaviour. Approaches to research. Wiley, Chichester
- Schalling D, Asberg M (1979) Biological and psychological correlates of impulsiveness and monotony avoidance. Read at the Intern Conf on Temperaments. Need for stimulation and activity, Sept 10-14, Warsaw, Poland
- Sears RR, Whiting JWM, Nowlis V, Sears PS (1953) Some child-rearing antecedents of aggression and dependency in young children. Gen Psychol Monogr 47:135-234
- Serot NM, Teevan RC (1961) Perception of the parent-child relationship and its relation to child adjustment. Child Dev 32:373-378
- Shaw JA (1978) Personality development: psychoanalytical theories. In: Balis GU, Wurmser L, McDaniel E, Grenell RG (eds) The psychiatric foundations of medicine. Butterworth, London, pp 372-389
- Watson G (1957) Some personality differences in children related to strict or permissive parental discipline. J Psychol 44:227-249
- Willenson D (1960) Relationship of adult personality characteristics to perceived parental behaviour. Diss Abstr 20:3393-3394

Received July 20, 1982