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The Patient's Primary Group

By SCOTT HENDERSON, PAUL DUNCAN-JONES, HELEN McAULEY and KAREN RITCHIE

The size and utilization of the primary group (those with whom one has interaction and commitment) was examined in 50 patients with non-psychotic psychiatric disorder and 50 matched controls. The hypotheses tested were that the patients would have a smaller size of primary group, less contact with its members and an inferior affective quality of interaction with it; and that this deficiency would be most marked in transactions with the principal attachment figure. Patients were found to spend the same amount of time as normals with their primary group, but proportionately more of that time was affectively unpleasant. They had fewer good friends and fewer contacts with persons outside the household. They had fewer attachment figures, almost one half of them reporting that either they had only one, or that they had had no recent contact with those alternatives that did exist. The majority of patients considered that their principal attachment figures gave them insufficient support. The complexity of interpreting these data is discussed.

Introduction

The principal tasks of social psychiatry are to identify those attributes of the social environment which are causally related to psychiatric disorders; and, no less important, those attributes which may protect people from becoming ill. It is therefore remarkable that few psychiatrists or sociologists have investigated the primary group of the psychiatric patient which is, by definition, the most significant component of the social environment. It was first described in formal terms by Cooley (1909), who spoke of it as being characterized by intimate face-to-face association and co-operation. Broom and Selznick (1973) define the primary group as those with whom one has both interaction and commitment. Although sociologists have paid great attention to the primary group in the context of social network theory (Faris, 1932; Bates and Babchuk, 1961; Clyde Mitchell, 1969; Litwak and Szelenyi, 1969), there has been little consideration of its relevance to psychiatric epidemiology.

Attention is focused here on the primary group in a sample of persons with non-psychotic psychiatric disorders. Such a study was prompted by the observation, familiar to clinicians, that psychiatric patients commonly describe deficiencies in the availability of close supportive relationships. While clearly this may be ascribed to their attachment requirements, or to the secondary effects of the disorder itself upon the individual and those around him, yet one might reasonably suggest the alternative possibility: that affectionally inadequate interaction with others is itself causally related to some psychiatric disorders. Such a view is made explicit in the writings of Caplan (1964, 1974) who refers to the 'psychosocial supplies' which are obtained from those around a person. Henderson (1974) argued that a number of psychiatric disorders may be causally related to conspicuous deficiencies in attachment requirements; and that many psychiatric symptoms have a powerful effect in correcting such deficiency by eliciting care from others. The

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same author (Henderson, 1977) has examined the commodity described as 'support' in relation to the social network and the occurrence of morbidity, particularly the neuroses.

Examination of the patient's primary group is also a logical step in considering the relevance of attachment theory, as developed by Bowlby (1969, 1973), to psychiatric disorder in adults. In primate evolution, social or inter-individual bonds have become 'a powerful adaptive mechanism' (Hamburg, 1968), affording considerable selective advantage. Since the hominidae of the Middle Pleistocene, group living has become an integral part of the behavioural apparatus (Washburn, 1961). Clearly, the primary group is to be seen as phylogenetically ancient. It would not be surprising, therefore, if deficiencies in the primary group were a factor carrying an appreciable influence on physical and mental health under present living conditions (Cassel, 1976; Henderson, 1977). For much of the population, these conditions have probably caused substantial reductions in the size and quality of the primary group.

In a widely-discussed paper, Brown *et al* (1975) found that in a sample of 200 women in Camberwell the presence of one close, confiding relationship had a strikingly high protective effect against neurosis when an individual was faced with serious adversity. Earlier, Post (1962), in examining the 'social orbit' of 40 psychiatric out-patients at the Maudsley Hospital, found that these persons were largely restricted to their families in their social contacts, 8 of the 40 having no social contacts beyond exchanging the time of day with unrelated persons. Post was hampered in his conclusions through having no control groups. Kreitman *et al* (1970) and Nelson *et al* (1970), in a detailed study of 60 neurotic men, found that patients and controls spent a similar amount of time with their wives, but the patients had significantly more of that time alone with their wives. This work focused, for good reasons, only on the interaction with the spouse and not with other members of the patient's primary group. Cassel (1976) has pointed to 'the contribution of the social environment to host resistance', concluding from his review of a number of social studies of medical disorders that the supports obtained from a person's primary group may have the function of cushioning the individual against biological or psychosocial stressors.

None of the above studies is able to offer conclusive evidence either for the pathogenicity of primary group deficiency, or for the protective effect of affectionally adequate ones. All they point to is the possible existence of an association, not a causal relationship, between social support and health. Should a causal relationship be established, this would be an epidemiological achievement of some significance. It is more likely that one can improve social supports in high-risk groups than that one can protect people from biological and psychosocial stressors.

Aims

The study had the modest aim of only describing interaction with the primary group in a sample of non-psychotic psychiatric out-patients and healthy controls. We wished to determine what, if any, components of interaction with the primary group differentiated the patients from controls. We were fully aware from the outset that no causality could be established in such a cross-sectional design; but that it was important to determine if there is an association between psychiatric (mainly neurotic) disorders and a deficiency in the numerical size or affectional adequacy of primary group relationships. In considering what components of the latter to examine, we were greatly assisted by two seminal papers by Weiss (1969, 1974) in which he proposed that social relationships are the vehicle for at least six 'provisions'. This anatomy of social relationships accorded well with our decision to examine the number and affectional quality of dyadic bonds (such as exist between spouses, or between a young person and a boyfriend or girlfriend) as well as what we would call 'diffuse bonds', which are typified by the relationship with persons further out in the primary group, such as other kin, friends and work associates.

'Support' is a vague term. In trying to identify its components, we found it best to start with a very simple model, in which it is assumed that one important aspect of support can be represented by the product of (i) the

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numerical size of an individual's primary group, (ii) the time spent with persons therein, and (iii) the affective quality of interaction with them. This, we considered, was a satisfactory framework for the empirical investigation of the substance and structure of social support.

The hypotheses were:

1. 'That, compared with a control group matched for age, sex, social class and marital status, a sample of persons with non-psychotic psychiatric disorders will be significantly deficient in (a) the numerical size, (b) the duration of contact, and (c) the affective quality of interaction with members of their primary groups.'
2. 'That this deficiency will be greater in relation to the principal attachment figure, such as the spouse or parent, than to more diffuse social bonds.'

The previous work we have cited gave good reason to accept the general importance of social support from the primary group. But the *nature* of this support was not fully specified. We wished to move towards a differentiation and more exact specification of primary group support.

Material

The patient sample

The patients were a consecutive series of persons (1) referred by their general practitioners to psychiatrists at two Health Centres in Canberra (n = 45), or (2) admitted for in-patient care to the Psychiatric Unit, Woden Valley Hospital, Canberra (n = 5). There were 20 men and 30 women. Research interviews were completed by us within one week of the first consultation, or within 48 hours of admission to hospital. Subjects were accepted for the study only if they and their doctor gave consent, if they were being referred to a psychiatrist for the first time in at least twelve months, if they were non-psychotic, and if they were currently free of any medical disorder. To our knowledge, the 50 patients in our sample were, with the above exclusions, a consecutive series of referrals to the psychiatric service in these two Health Centres. We were aware, nevertheless, that a selection factor could be operating in the composition of the sample. Those general practitioners and psychiatrists who were aware of our basic hypothesis might have preferentially referred neurotic patients whose social networks fitted in with this. We know that a number of general practitioners did know about the Research Unit's work and had expressed interest in, or even agreement with the hypothesis. Their referral practice might conceivably have been altered accordingly. The possibility of this bias is acknowledged and its existence should be considered when interpreting the findings.

The control sample

For each patient, a control was sought, matched for age (plus or minus three years), sex, occupation and marital status. Housewives and wives who worked outside the home were appropriately matched. This considerable undertaking was achieved by selecting persons so matched from the case register at the Village Health Centre in the suburb of Kambah, Canberra, and inviting them to take part, provided (1) that they and their doctor agreed to this; (2) that they had presented with no psychiatric or psychologically-determined symptoms, including insomnia, at any stage in the Health Centre's eighteen months existence; and (3) that they had had no recent medical disorder. In all, 70 persons were approached for us by letter by their Health Centre doctor. Twenty-six refused or were persistently not at home when one of us called by appointment. All control subjects were screened with the 60-item General Health Questionnaire (GHQ) (Goldberg, 1972). Of the 44 persons so examined, three had GHQ scores of over 12. In each case, the symptoms related to being pregnant or to having recently had a minor infection. These three controls were therefore retained. A further four controls were recruited from the Canberra Parents Without Partners Organization. This proved to be a necessary supplementary source for finding controls for the separated, divorced and widowed patients.

The characteristics of the patient and control samples are shown for comparison in Table I. Despite the use of a screening procedure such as the GHQ, a control group derived from a general practice case register is not as desirable as a community sample, since in Australia those persons registered at a general practice are likely to have had a disturbance in health, in this case within the previous 18 months of the Health Centre's existence. On the asset side, the sample procedure we used enabled careful demographic matching of each patient to be achieved. Such matching from a community sample would have required resources beyond our capacity.

Method

Instruments

All patients completed the GHQ and were there-

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TABLE I

Comparison of patients and controls on matching criteria

		Patients	Controls
Sex:	Male	20	20
	Female	30	30
Age:	to 19	4	4
	20–29	23	21
	30–39	15	17
	40–49	5	7
	50 and over	3	1
Marital status:			
	Single	10	11
	Married	30	31
	Separated or divorced	9	8
	Widowed	1	0
Occupation:			
	Professional	6	6
	Semi-professional ..	10	13
	Skilled	22	23
	Semi-skilled	5	3
	Unskilled	5	1
	Unclassified	2	4

Note: For married women 'occupation' is husband's occupation, otherwise own occupation.

after interviewed using the Present State Examination (PSE) (Wing *et al*, 1974). It was explained to them that research was being conducted on the causes of nervous disorders in Canberra. The clinic and the interviewer for the PSE are shown in Table II.

The GHQ was used as a screening instrument to ensure that each control had a low probability of currently having a non-psychotic psychiatric disorder. It has been shown to fulfil this function very adequately (Goldberg and Blackwell, 1970; Goldberg, 1972; Goldberg *et al*, 1976). For the patients, it was used a a measure of morbidity in parallel with the PSE. This provided one measure of clinical

TABLE II

Patient sample by interviewer and clinic

	A.S.H.	H.McA.	K.R.	Total
Canberra Health Centres	19	5	21	45
Woden Valley Hospital psychiatric in-patients	—	5	—	5
Total	19	10	21	50

severity. The principal function of the PSE was in allowing us to identify reliably and to describe in an internationally standardized way the diagnostic categories of the cases we studied. This, we suggest, is a centrally important application of the instrument in research. The PSE data were analysed by the MRC Social Psychiatry Research Unit in London (Professor J. K. Wing). The allocation of patients to diagnostic categories is shown in Table III.

Following this, the patients were interview by H.McA. or K.R. using a Life Event Schedule and the Social Interaction Schedule, instruments both prepared specifically for this study. The former was a modification of the instruments developed by Holmes and Rahe (1967), Paykel *et al* (1971) and Tennant and Andrews (1976).

The Social Interaction Schedule

The Social Interaction Schedule examines a person's primary group interaction, which is the principal consideration of the present investigation. For present purposes, we define the primary group as being made up of all kin, nominated friends, work associates and neighbours. Outside the primary group are those persons met in essentially service encounters (e.g. petrol-pump attendants, shop-assistants and tradesmen) or those who are strangers to the person. The correctness of these operational boundaries is not a problem for the present study because we applied identical methods and definitions to both patients and controls.

The Schedule explores the respondent's primary group in the following areas: (1) the numerical size and composition of the person's household; (2) the presence of all other kin in the community; and (3) the respondent's estimate of the number of persons he or she sees as 'good friends'. No attempt was made to have respondents use a standardized definition of this: we elected to accept the respondent's own judgement of who for him was a good friend. The interview then explores in some detail the respondent's interaction in the previous week with (1) his immediate household; (2) all others in his primary group; and (3) persons outside the primary group. This third category was included because we suspected that for some people, particularly the socially isolated, such service encounters might take on a function otherwise met by the first two, as in the case of the elderly and the widowed.

The week prior to the interview, chosen as the sample of time in this study, has the merit of being recent for recall and the deficiency of perhaps not being typical for the patients: both household and social arrangements might be altered not only by the patient's symptoms but also by the prospect of

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entering treatment by a psychiatrist. The patient and his immediate circle might conduct themselves rather differently at this stage in the process, with a move towards greater (or occasionally lesser) degrees of attachment and support.

Types of Interaction

An investigation of interaction between a person and all others in his world requires one to divide such interaction into different levels of intensity. An earnest discussion with one's spouse is likely to be of different affective significance from a brief service encounter. Yet we wished to include even the latter category because of its possibly carrying a substitutive function for the socially isolated. This is the concept of functional equivalence in social relationships. As a basis for studying engagement in transactions of different affective intensity, we decided to establish three levels, Types 1, 2 and 3. It is emphasized that this typology is wholly arbitrary in its derivation and has been set up by us only as a method for comparing patterns of social interaction in the healthy and in those with minor psychiatric disorder. It has some structural similarity to the method employed by Kreitman *et al* (1970) and Nelson *et al* (1970) for their study of neurosis and marital interaction, but it allows a consideration of all interaction with the primary group and not just that between subject and spouse. The three types are as follows:

Type 1: Affectively intense interaction with one and only one other person. The latter may be within or without the primary group. A third person may be physically present but must not be a participant in the transaction (e.g. sitting talking to one's spouse, both participants showing attention towards each other for most of the episode). Type 1 interaction is the commodity being sought by a wife who says, as one sometimes hears in clinical practice, 'If only he'd put his paper down and speak to me.'

Type 2: This may be of two forms: affectively intense interaction with more than one person; or affectively superficial interaction with one or more others, provided these are within the primary group (e.g. everyday family interaction, talking with a group of kin or friends, or conversing superficially about inconsequential matters with a spouse). It will be obvious that Types 1 and 2 interaction may interpenetrate, but we found that subjects had no great difficulty in reporting which category had predominated in any one episode.

Type 3: Affectively superficial interaction with one or more others who are outside the primary group (e.g. speaking to a shop assistant or bus driver).

To examine the distribution of these three types of interaction, we asked each respondent to recall the following for the previous seven days:

1. How many minutes or hours had been spent with *each* member of the household, working systematically through each weekday and the weekend.

2. The number and duration of contacts with persons in the primary group but outside the household, again for each weekday and at weekends.

3. Of the period of time spent with each person, what proportion was 'pleasant' (Type 1, 2 or 3 positive); 'neither particularly pleasant or unpleasant' (Type 1, 2 or 3 neutral); or 'unpleasant' (Type 1, 2 or 3 negative).

In this way, information was obtained about the affective quality of a person's social transactions over the previous week.

The next stage of the interview identifies the respondent's principal attachment figure and who else, in ranked order, are those persons with whom the respondent has affectional ties. For this, respondents were asked who of all persons they felt they needed most or to whom they felt closest and most attached. In descending ranked order, other attachment figures and their relationship to the respondent were recorded up to a maximum total of nine persons. A series of questions explored what comfort, help or support the respondent had obtained in the last week from the principal attachment figure and from other attachments, including non-personal ones such as work, hobbies or religion. They were then asked what, if anything, they felt was missing from life at the moment, and whether this was of an interpersonal, personal or extrapersonal nature; that is, if it was in relationships with other persons, in some attribute of the subject himself, or in material matters such as housing or money.

Last came a 15-item self-completion instrument designed to tap the person's perception of the social interaction available to him and his degree of satisfaction with it. Examples of items are 'People don't come to visit me as often as I would like' and 'I don't have anyone I can confide in'. Responses are on a five-point Likert-type scale. Ranging from 'strongly agree' to 'strongly disagree', the items are approximately balanced to avoid errors from response set. The 'index of perceived social support' formed by summing the 15 items has a reliability (Cronbach's alpha) of ·87 within the patient sample and ·83 within the control sample. No assessment of the validity of this index has so far been attempted.

The GHQ, PSE, Social Interaction Schedule and Life Event Inventory were administered to each of

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the patients and, with the exception of the PSE, to the controls. The PSE's were conducted by three of us, A.S.H., H.McA. and K.R. (Table II). A comparison of the PSE ratings by A.S.H. (a psychiatrist) and K.R. (a psychologist) in relation to the subject's GHQ scores will be described elsewhere (Wing *et al*, in preparation). H.McA. and K.R. performed the remainder of the interview, each examining approximately half of the patients and controls. When the interviews were completed, it was found that for a few subjects certain items of information were missing. This is noted in the Tables where it has occurred.

Reliability

In a pilot study, the interviewers jointly examined twenty patients; in the course of this operation guide notes were developed to improve reliability, both between them and for each over time. Tying definitions were prepared for items where interpretation by either respondent or interviewer might vary. In the last ten cases in the pilot study, agreement was reached in over 90 per cent of dichotomous items. During the main study itself, tandem interviews were repeated from time to time. These showed that the high level of reliability was being maintained. No attempt was made to assess test-retest reliability, because the length of the total interview was considered too demanding on our respondents to justify a second examination of them. Throughout the study, the team discussed ratings or interpretations about which there was uncertainty.

The reader may consider that the amount of detail sought, particularly with regard to social interaction, is an unreasonable request for most people and that it is therefore unlikely to have yielded reliable or valid information. We found that both patients and controls could produce such information readily, though certainly not effortlessly. We can claim only that the data were obtained in a standard manner by interviewers using common definitions; and that a high level of inter-observer reliability was achieved in the course of a pilot study and was maintained thereafter.

Findings

The patient material

The distribution of neurotic disorder according to PSE (CATEGO) Class (Wing *et al*, 1974) is shown in Table III. This is important because it specifies the type of case on which the observations were based.

TABLE III

Classification of patient sample from Present State Examination

	PSE class	Number of patients
N	Neurotic depression	30
R	Retarded depression	7
A	Anxiety states	10
	Other	3
	Total	50

Socio-demographic comparisons

No significant differences were found in comparisons of patients and controls on education, employment status, occupation, spouse's occupation, time since settling in Canberra, access to telephone, access to car, number in household or the presence in the household of a baby, pre-school child or school child. These comparisons are all based on conventional χ^2 tests, using Yates' correction where appropriate. Patients, though, differed significantly from controls on immigrant status. Nine patients compared to only one control had been resident in Australia less than eleven years. It is possible that this difference might affect comparisons in terms of social interaction; we revert to it below. Otherwise, the two samples are highly comparable in terms of the most relevant socio-demographic variables, in addition to those used in matching.

Adverse life events

There was no significant difference in the number of adverse life events experienced by patients and controls (7·3 versus 6·6 respectively); but the sum of the weighted scores (Tennant and Andrews, 1976) for these events was much higher for patients (109 versus 62), so that they reported having been exposed to a much greater load of adversity in the previous twelve months. The average severity weight for the events reported by patients was 14·8, that for controls 9·7. A more detailed consideration of adversity, support and symptoms will be undertaken in a later paper.

Social interaction

Table IV compares the extent of social sup-

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TABLE IV

Indicators of social support

	Means		P
	Patients	Controls	
Number of close relatives in Canberra	1·5	2·2	NS
Number of good friends in Canberra	2·2	5·1	·001
Number of primary group contacts (outside household) in past week	4·0	6·5	·01
Number of contacts with persons outside primary group in last week	10·0	39·9	·001
Total number of attachment figures	2·5	4·8	·001
Number of attachment figures in Canberra	1·7	3·0	·01
Index of perceived social support (15 items)	44·2	59·0	·001

	Per cents		P
	Patients	Controls	
Reporting some contact with secondary attachment figures in previous week	42	74	·001
Attachment support considered sufficient	36	94	·001
'What do you feel is missing from your life?'			·001
Interpersonal	60	28	
Personal	18	8	
Extrapersonal/Social	6	4	
Nil	16	60	

Note: Significance of differences between means assessed by one-tailed t-tests. N is 45 to 50 in each group for these comparisons.

port available to patients and controls. Tables V and VI compare their hours of social interaction. Apart from the percentages in the lower half of Table IV, the statistical significance of all comparisons has been assessed by t-tests. The quoted probabilities are based on uncorrelated t-tests but virtually identical results are obtained by correlated tests based on the matching of patients and controls (the correlations are of the order of ·1 to ·4). We prefer the uncorrelated test, since in the correlated one pairs are excluded when data are missing for either member of the pair. This leads to greater attrition. The variable have skew distributions, with standard deviations often larger than the corresponding means. While the t-test is fairly robust against departures from normality, as an extra precaution we also made sign tests (Siegel, 1956, pp 68–75) based on the matched pairs, to check a number of comparisons; these supported the conclusions from the t-tests. The percentage comparisons in the lower half of Table V are based on χ^2 tests. Statistical significance is indicated in terms of the traditional levels of ·05, ·01 and ·001; for the t-tests these values will only be approximate, given the skewness of the variables.

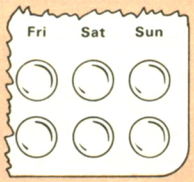
Simple counting measures (Table IV) suggest that the quantity of support available to patients is much less than that available to controls. Compared to controls, patients claim only half as many good friends and half as many attachment figures, either in total or in Canberra. During the week prior to interview, they had only three-fifths the number of contacts with members of the primary group outside the household. Three times as many patients as controls—nearly half of all patients—claimed either to have no attachment figures apart from the principal one, or else had no contact with these during the previous week. Patients had four times fewer contacts with people outside the primary group. Their subjective evaluation of their attachment figures is that they have insufficient support from these persons and there is a deficiency in their lives in this area

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1. Symposium, "Research and Clinical Investigation in Depression" Stratford-upon-Avon, 1975, p.90.

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References: *Price's Textbook of the Practice of Medicine, 11th Ed.* (1973) Oxford University Press, London, p. 1369; Goodman, L.S. & Gilman, A. (1975) *The Pharmacological Basis of Therapeutics, 5th Ed.*, Macmillan, New York, p. 187. Conn, H.F. (1973) *Current Therapy,* Saunders, Philadelphia, p. 842; *Today's Drugs/1* (1970) British Medical Association, London, p. 165. 'Parstelin,' 'Parnate,' and 'Stelazine' are trade marks. Full information is available on request.
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of interpersonal relations. They have significantly lower scores on the index of perceived support.

Table V compares patients and controls on summary measures of hours spent in social interaction; a more detailed analysis is given in Table VI. The upper half of Table V summarizes the hours spent in interaction with other household members, with members of the primary group outside the household and with persons not in the primary group. Patients spend less time in interaction with people *outside* their primary group, but apart from this their total hours of interaction does not differ significantly from the controls. The next two lines of the Table present totals for interaction with the principal attachment figure and interaction with all other attachment figures. (Note that these totals have already been included in the earlier figures for household and other primary group members.) Patients do not report significantly less interaction with their principal attachment figures. They *do* report less interaction than controls with *other* attachment figures. This is partly because they report having fewer attachment figures: many patients report no interaction at all during the previous week with secondary attachment figures.

The lower half of Table V compares patients and controls on different types of interaction. These comparisons represent totals for interaction with household members, other primary group members and others outside the primary group, combined. There is no difference in the amounts of positive interaction, but controls have substantially more neutral interaction and patients very much more negative interaction. The pattern is the same for type 1 and type 2 interaction, though the magnitudes of the differences vary.

These overall patterns are largely supported by the more detailed analysis in Table VI. For positive interaction, the figures for patients and controls are very similar. For neutral interaction, every comparison shows controls higher than patients, though only two of the differences achieve statistical significance. For negative interaction, every comparison shows the patients higher, and five of the differences are significant.

We noted earlier that the patient sample contained an excess of relatively recent immigrants. To check the effect of this, we removed from the analysis the ten respondents (nine patients and one control) who had arrived in Australia in the last ten years, and also the ten matching respondents (nine controls, one patient), and then re-ran all comparisons of means. The results of this check were reassuring. With the reduced sample (40+40) some comparisons were only significant at a lower level and one or two slipped just below significance. But the pattern of results remained unchanged; interpretatively, the conclusions stood, and many figures scarcely changed numerically.

To summarize, patients spent the same

TABLE V

Mean hours of social interaction in last week: (a) Summary measures

	Patients	Controls	P
Total interaction with household	57·9	64·6	NS
Total interaction with primary group (excluding household)	14·3	12·6	NS
Total interaction with persons not in primary group	17·3	25·2	·05
Total interaction with principal attachment figure	26·8	33·3	NS
Total interaction with other attachment figures (when present)	27·0	39·2	NS
Number of hours alone	17·3	9·7	·05
Total type 1 positive interaction	8·8	8·5	NS
Total type 1 neutral interaction	10·1	17·0	·01
Total type 1 negative interaction	3·5	0·4	·001
Total type 2 positive interaction	12·6	15·4	NS
Total type 2 neutral interaction	40·1	51·9	·05
Total type 2 negative interaction	6·7	1·7	·001

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TABLE VI

Mean hours of social interaction in last week: (b) Detailed measures

		Positive			Neutral			Negative		
		Patients	Controls	P	Patients	Controls	P	Patients	Controls	P
Household:	Type 1 ..	4·2	5·3	NS	9·3	14·9	·05	3·0	0·2	·01
	Type 2 ..	5·4	4·6	NS	31·3	38·4	NS	4·7	1·1	·01
Primary group (not household):										
	Type 1 ..	3·6	2·4	NS	0·6	1·5	NS	0·3	0·1	·05
	Type 2 ..	5·7	4·5	NS	3·1	3·9	NS	1·0	0·2	NS
Others:	Type 1 ..	0·7	0·9	NS	0·2	1·3	·05	0·3	0·1	NS
	Type 2 ..	3·2	6·7	NS	6·5	9·2	NS	0·9	0·5	NS
	Type 3 ..	1·6	1·4	NS	3·6	5·2	NS	0·2	0·0	NS
Principal attachment figure:	Type 1 ..	2·0	2·9	NS	3·2	5·4	NS	1·4	0·1	·05
	Type 2 ..	3·9	2·8	NS	14·9	21·9	NS	1·4	0·2	·05
Other attachment figures:	Type 1 ..	2·6	2·1	NS	3·4	8·6	NS	0·4	0·1	NS
	Type 2 ..	5·5	3·9	NS	14·3	24·1	NS	0·9	0·4	NS

amount of time as normals with their primary group, both household members and others; but proportionately more of that time was perceived as affectively unpleasant. Patients said that they had fewer good friends and many fewer contacts with persons outside their primary group. They had significantly fewer contacts with persons outside the household. Patients and controls did not significantly differ in the duration of interaction with their primary groups. Patients reported having fewer attachment figures in their present lives: a significant number reported having only the principal attachment figure, with no alternatives. Finally, patients much more frequently saw their principal attachment figure as not providing sufficient support for their requirements. Hypotheses 1a, 1c and 2 are therefore upheld and hypothesis 1b is rejected.

Discussion

These findings, when considered as a whole, indicate that neurotic patients in treatment report having a deficient primary group. This deficiency is both in numerical size and in affective quality, but not in the total duration of transactions. These results require careful interpretation. We have no definite information on whether the primary group deficiency was long-standing or recent. We shall examine several possible interpretations, then go on to consider which one best fits the findings.

(1) The first class of possibility is that the interviewer recorded data in favour of the hypotheses, either through selective attention or through conscious distortion. Since both the interviewers for the Social Interaction Schedule were fully aware of the hypotheses and the purpose of the study, this possibility stands. There is, though, no evidence of consistent distortion in the expected direction across the board; and on a number of variables the findings are negative where the interviewer would almost certainly have expected significant differences, such as patients and controls having a similar time in interaction with the principal attachment figure, with the household and with others in the primary group.

(2) The next class of possibility is that the patients, but not the controls, gave an account of primary group interaction which was incorrect, in the sense that it was not what had truly happened in the previous week. The deficiency might not be an accurate representa-

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tion of the real social situation, but an expression of the patient's *weltanschauung*, in which his view of his social world is the subject of distortion because of his mood, particularly depression. One would expect such judgemental distortion to have fairly uniform application to those variables which are open to it, yet the results do not support such an interpretation: patients and controls report similar total time in social interaction with every component of the primary group; and furthermore, a similar amount of that time is affectively pleasant. Patients, therefore, do not see themselves as deprived of time with others. Admittedly, they do have less neutral and more negative interaction. If there is a distortion effect in the patients' reporting of what really happened, it would be surprising if this were to inflate the affectively negative but not decrease the positive. Again, the hours reported as spent alone are not greater for patients. This is an item in which self-pity, if present, would be likely to reveal itself. A distortion effect, if it is indeed present, is acting highly selectively on the variables examined.

As a further check on this possibility, a comparison was made of the primary group measures in those patients whose symptoms were predominantly of depression (PSE Class N and R; n = 37) and those with mainly anxiety or phobic states (PSE Class A and B; n = 13). No significant difference was found. We therefore suggest that there is no consistent pattern in the responses which would constitute evidence of affectively-derived distortion of the patient's social interaction. Even if this interpretation is not accepted, a difference in primary group interaction which is only perceived is still of clinical relevance: it is an expression of the patient's dissatisfaction with the provisions of his social environment, and it is therefore relevant to the patient's treatment. It must be noted that the dissatisfaction postulated here arises from affective colouring and not from unmet requirements, as referred to later in this section.

(3) A third possibility is that the symptoms themselves may have had a repelling effect on primary group members. While symptoms such as anxiety, depression and hypochondriasis may have a care-eliciting function, causing concern in some, as argued by Henderson (1974), these same symptoms and the patient's behaviour may for others make him less attractive in social encounters. The consequence is that he would be less sought after; and the affective quality of his transactions could become soured, leading to an attrition of primary group membership. Having symptoms could also operate directly, reducing primary group interaction by making the patient socially less active. We are not able to make a full assessment of the likelihood of this from the present data because one would need to know if the deficiency in the primary group preceded or followed the symptoms. It is only our impression that for many the symptoms followed the deficiency. Furthermore, there was no indication of the patients' being less socially active, because they spent the same amount of time as controls in primary group interaction, though with fewer persons.

A spiral effect is also a distinct possibility in this category: primary group deficiency may itself generate symptoms (*vid. inf.*) which may then lead to further depletion.

(4) Fourthly, the reason may lie in the personality of the patients, who might, premorbidly as well as while ill, be less capable of establishing and maintaining mutually rewarding personal relationships (Foulds, 1965, pp 3–17). This would be a relatively time-stable trait, operating independently of situational variables (McVicar Hunt, 1965; Bem and Allen, 1974). Such an interpretation would lead one to propose that patients are deficient in their primary group because they are deficient in the social skills necessary to establish and maintain it. Their personality attributes might lead *independently* both to neurotic symptoms and to primary group deficiency. Again, we are not able to assess the validity of this interpretation from the present study, but it was our impression that for some patients personality attributes may indeed have made relationships difficult to establish and to maintain. In this, we exclude the schizoid type, because such persons have little requirement for close social bonds and appear to experience no distress in their absence. Rather it is the dysthymic type whose introversion may make the formation of relationships difficult, particularly in the setting of a strange city. Many such

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persons may also fall into the next category if their attachment requirements remain unmet.

(5) Fifthly, the patients may differ from the controls in temporarily having a larger *requirement* for 'support'. This might be the product of being ill or of recent exposure to adversity, both of which would generally be acknowledged to tend to increase an individual's attachment requirements. In the present study, patients did have a higher exposure to recent adversity. At the same time, it is a reasonable hypothesis that marked attachment requirements characterize a neurotic population.

(6) A sixth possibility is that the patients we examined were those who had not only developed symptoms but had found these personally unmanageable to a degree that they had sought medical help; it is conceivable that a deficient primary group is more characteristic of those people with symptoms who seek professional help than it is of those who cope without this. That is, lack of an adequate primary group may be one factor promoting help-seeking behaviour. This interpretation can be examined only by conducting a study at the field level.

(7) Lastly, primary group deficiency may indeed have been present in the patient sample and may have acted as a causal factor.

If a deficiency in the primary group does act directly as a causal factor in neurosis, it may do so in its own right (condition 7) or, under some circumstances, through 3, 4 or 5. In each of these situations, the patient's requirements are unmet. These are some of the issues in logic which must first be considered by anyone wishing to resolve this problem. To take the interpretation of the data further, we shall now consider separately the size of the group, the time spent in interaction, and lastly the important category of attachment figures.

The size of the primary group

While the two samples did not differ significantly in the number of kin present in Canberra, for patients there were significantly fewer persons and contacts elsewhere in the primary group and many fewer contacts outside the primary group. This suggests that the deficiency for patients may be self-generated: social skills would be unlikely to have much influence on the presence of relatives in the same city, while the frequency of contacts outside the household may be a function of the individual's level of role performance; that is, patients may be less able to recruit and maintain their primary group membership. Recruitment of attachment figures and good friends may reasonably be considered to be dependent on social skills, particularly the capacity to establish and maintain close social bonds. Patients may have more difficulty in taking the first steps towards making friends. Lacking such social skills, they may be less inclined to perceive and recall as social interaction the contacts they had outside the primary group. This view is strengthened by the finding that our patients did indeed have fewer contacts there.

These observations suggest that our patients may not have had a deficiency of the primary group thrust upon them: it may have been more the product of their own social performance. The present data do not allow a consideration of whether this might be due to symptoms or to personality.

Time spent in interaction with the primary group

The pattern here, with comparable amounts of pleasant interaction, suggests that the patient's clinical state cannot be consistently preventing pleasure in encounters, nor consistently distorting the perception of these towards a gloomy or unfavourable view of all interpersonal transactions.

The attachment figures

In their study of marital interaction in neurosis, where the husband was the patient, Nelson *et al* (1970) found that the mean time spent together by patient and by control pairs was 55·3 and 53·0 hours respectively in the week prior to interview. These are considerably longer periods than found in the present study (Table V). The difference may be due either to the marital styles of the Chichester and the Canberra populations, or to the methods of enquiry used in the two studies.

As indicated, many patients reported having only one principal attachment figure, usually the spouse, whereas the controls had a range of alternative persons, albeit subsidiary in affec-

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tional ranking. Although both groups spent similar time with the principal attachment figure and did not significantly differ in the length of positive and neutral Types 1 and 2 interaction, the patients had more negative interaction and saw their principal attachment figures as failing to provide 'enough support' for them. These findings make much sense. Although having as much time with their principal attachments as did controls, the patients saw theirs as not being sufficiently supportive. This would imply that the patients had greater attachment requirements than the controls and that these were unmet. An alternative, though it seems to us less convincing, is that the excess of negative interaction for the patients may be the very vehicle through which the perceived lack of support is mediated. An excess of unpleasant time with the closest other might conceivably be expressed as failure to give support, despite having as much positive interaction as controls. Finally, it should be borne in mind that the patients frequently had no alternative attachment figures from whom to derive support. For many, all attachment requirements had to be met by one person. It would not be surprising if this person were often unable to provide sufficient support, whereas the controls obtained supportive input from a wider range of persons.

Conclusion

The data in this study suggest very strongly that for patients, but not for controls, the individual's requirements for social interaction and support were not met. That lack of available attachment figures and of supportive interaction is found to be associated with the presence of neurotic symptoms is a finding wholly consistent with attachment theory. The patient's symptoms can be considered as due, *inter alia*, to separation anxiety and the response to loss of those affectional bonds necessary for health.

If the present findings can be confirmed by other workers in other populations, they will carry useful implications for management and for primary prevention. On the basis of this study, mental health is associated with having several good friends, abundant contacts with persons both outside the household and outside the primary group, and above all, not one but a number of attachment figures. It is principally through these that the provisions of social relationships, as empirically described by Weiss, are mediated. While such provisions may be the consequence rather than the cause of having good mental health, it is at least reasonable that their value should be assessed in a prescriptive trial, in which an effort is made to develop them in half of a sample known to have symptoms and known also to be deficient in these assets. Such a design is being followed by us in Canberra.

In clinical work, we should like to propose the term 'primary group deficiency' as an accurate description of the situation where such interaction is recognized to be lacking. Since the provision of support is an important part of a doctor's or a social worker's task, and since community programmes go to considerable expense to provide it for those in need, it would be useful to know a great deal more about the patient's primary group.

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