REPORTED PARENTAL CHARACTERISTICS IN RELATION TO TRAIT DEPRESSION AND ANXIETY LEVELS IN A NON-CLINICAL GROUP

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Care and overprotection appear to reflect the principal dimensions underlying parental behaviours and attitudes. In previous studies of neurotically depressed patients and of a non-clinical group, subjects who scored their parents as lacking in care and/or overprotective had the greater depressive experience. The present study of another non-clinical group (289 psychology students) replicated those findings in regard to trait depression levels. In addition, associations between those parental dimensions and trait anxiety scores were demonstrated. Multiple regression analyses established that 9–10% of the variance in mood scores was accounted for by scores on those parental dimensions. Low maternal care scores predicted higher levels of both anxiety and depression, while high maternal overprotection scores predicted higher levels of anxiety but not levels of depression. Maternal influences were clearly of greater relevance than paternal influences.

A number of factor analytic studies (Roe and Siegelman, 1963; Schaefer, 1965; Raskin et al., 1971) suggest that parental behaviours and attitudes may be viewed as having two principal components: a care dimension and a dimension of psychological control over the child. After further defining these dimensions, which were termed care and overprotection, Parker et al. (1979) designed a brief questionnaire (the Parental Bonding Instrument) to measure subjects' reported parental care and overprotection. The clinical impression (Parker, 1978) that neurotic depressive patients are likely to perceive their parents as providing an insufficiency of care and/or as being overprotective was then examined in controlled studies of two separate depressive disorders (Parker, 1979). Bipolar manic-depressive patients scored like controls whereas neurotic depressives reported less parental care and greater maternal overprotection. As well, depressive experience was assessed in a non-clinical group in relationship to characteristics of those 2 parent-figures whom they considered to be most influential.

When asked to nominate their two most influential parent-figures, someone other than a biological parent was nominated by 11% of 236 post-graduate university students. Depressive experience was measured in several ways: information on the number of episodes of depression in the preceding year and the usual duration of such episodes was sought, and subjects completed scales measuring self-esteem, alienation and trait depression. Greater depressive experience was associated with the reporting of low parental care and/or parental overprotection in relation to each nominated parent-figure.

In conducting such studies, the writer would argue that it may be more important to assess the influence of relevant parent-figures rather than restrict assessment to natural parents. Nevertheless, the hardy tradition of considering natural parents only should not be overridden on the basis of a
personal view. It was decided that in the present attempt to replicate the initial findings that the study would restrict consideration to natural parents. This would allow for the relative influence of mothers and fathers to be compared. In addition, any relationship between parental experience and anxiety levels was to be assessed.

Method

Subjects. All first-year psychology students at the University of New South Wales attending seminars during one week in early 1977 were asked to complete a mood measure and a measure of parental characteristics, being told that the researcher was interested in obtaining data from a normal group. Hypotheses were not disclosed. Although tutors were requested to collect information on the number of students declining the questionnaire they did not record this formally. While a response rate was not determined the writer was informed that very few of the students had declined to complete the forms.

Subjects were asked to complete a trait depression scale and its companion trait anxiety scale (Costello-Comrey, 1967). That depression scale was designed to measure a person's tendency to experience a depressive mood and the anxiety scale to measure the predisposition to develop anxious-affective states. As well, subjects were asked to complete the Parental Bonding Instrument (PBI) for each parent, providing scores for parental care and overprotection. Three subjects were unable to complete the maternal, and 12 the paternal form of the PBI due to early loss of a parent.

Eight forms were rejected as incomplete or possibly invalid. Analysis was made of questionnaires returned by 289 (191 female, 98 male) students who had a mean age of 22 years (S.D. 5.9, range 18–50 years). The level of significance for principal associations was set at \( p < 0.01 \) to reduce the possibility of Type 1 errors. All tests were two-tailed.

Results

A mean score of \(-26.5 \text{ (S.D. 14.1)}\) was obtained on the Costello-Comrey trait depression scale; 60 was then added to each score to create positive scores and subsequent references will be to these derived scores. The mean scores on the Costello-Comrey trait depression score then was 35.5 (S.D. 16.2) for male subjects and 32.6 (S.D. 12.9) for female subjects. On the trait anxiety scale the mean score was 26.1 (S.D. 10.4) for male subjects and 28.0 (S.D. 10.1) for female subjects. Neither of these sex differences was significant. Trait depression scores were not independent of trait anxiety scores (\( r = +0.525, p < 0.001 \)).

Mean care scores on the PBI were 27.1 (S.D. 7.3) for mothers and 23.7 (S.D. 8.5) for fathers, while mean overprotection scores were 14.3 (S.D. 7.4) for mothers and 12.5 (S.D. 7.0) for fathers. These differences were not significant. When raw PBI care and overprotection scale scores were intercorrelated a coefficient of \(-0.440 (p < 0.001)\) was obtained for mothers and \(-0.285 (p < 0.001)\) for fathers. This suggested that parental overprotection was associated with lack of parental care. While it may be of clinical relevance to know that overprotective parents are seen as deficient in care rather than as caring, the aim of the present study was to examine parental care and parental overprotection as if they were pure and independent dimensions. Independent care and overprotection scores were therefore created by using a partialling out procedure which had the effect of removing any care component from the raw overprotection scores and any overprotection component from the raw care scores.

If the care and overprotection scales of the PBI are intersected comparison can be made of broad parental bonding characteristics. Figure 1 shows the four conceptualized parental bonding positions (Parker et al., 1979) together with a middle or 'average' group. An appropriate radius was determined so that the average group contained approximately one-fifth of the total sample. On the basis of independent care and overprotection scores for their parents, respondents were assigned to one of the five regions established. It can be seen (Table 1) that those exposed to high care with low overprotection in relation to either parent had the lowest mean trait anxiety, and the lowest mean trait depression scores in relation to mothers and low depression scores in relation to fathers. By comparison those exposed to low care and high overprotection from their mothers scored highest on trait anxiety and depression; and those who allocated their fathers to that region also scored highly on the anxiety and depression scales.

Two multiple regression analyses were then performed to assess the degree to which scores on the PBI for each parent could predict scores on the mood scales. In the first analysis the degree to which parental care and overprotection scores predicted trait depression scores was examined. The zero-order correlations in Table 2 show that depression scores correlate negatively with parental care scores and positively with parental overprotection scores. However, when all PBI scores are entered as a set, maternal care scores are the only significant predictor of depression scores. Results show that the variable in depression scores was almost solely...
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High overprotection

"Affectionless control"

Low care

"Absent or weak bonding"

"Optimal bonding"

High care

"Affectionate constraint"

Low care overprotection

FIGURE 1 Comparisons of broad parental bonding characteristics allowed by intersecting two PBI scales and allowing a middle or 'average' region.

influenced by maternal care scores which accounted for 9.3% of the variance.

Table 3 shows that anxiety scores correlate negatively with parental care scores and positively with maternal overprotection scores when the zero-order correlations are examined. When all PBI scores are entered as a set only maternal care and maternal overprotection scores predict anxiety scores significantly. Results show that 6.1% of the variance in anxiety scores was accounted for by maternal care scores and a further 2.6% of the variance by maternal overprotection scores.

TABLE 1 Mean scores on trait mood variables for subjects occupying five bonding positions in relation to each parent.

<table>
<thead>
<tr>
<th>Parental bonding position</th>
<th>I</th>
<th>II (Low care, High overprotection)</th>
<th>III (High care, High overprotection)</th>
<th>IV (High care, Low overprotection)</th>
<th>V (Low care, Low overprotection)</th>
<th>F ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent and trait variable</td>
<td>Average</td>
<td>High overprotection</td>
<td></td>
<td>High overprotection</td>
<td>Low overprotection</td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trait depression</td>
<td>36.5</td>
<td>43.7</td>
<td>32.0</td>
<td>27.6</td>
<td>35.0</td>
<td>10.85†</td>
</tr>
<tr>
<td>Trait anxiety</td>
<td>28.2</td>
<td>32.7</td>
<td>29.2</td>
<td>24.5</td>
<td>26.3</td>
<td>5.13*</td>
</tr>
<tr>
<td>n</td>
<td>50</td>
<td>35</td>
<td>44</td>
<td>95</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trait depression</td>
<td>37.5</td>
<td>35.4</td>
<td>28.3</td>
<td>29.7</td>
<td>34.4</td>
<td>4.45*</td>
</tr>
<tr>
<td>Trait anxiety</td>
<td>29.7</td>
<td>28.9</td>
<td>26.6</td>
<td>23.6</td>
<td>28.3</td>
<td>4.12*</td>
</tr>
<tr>
<td>n</td>
<td>56</td>
<td>43</td>
<td>39</td>
<td>78</td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

† p < 0.001  * p < 0.005

Discussion

In the previous study (Parker, 1979) parental care scores correlated negatively, and parental overprotection scores correlated positively with trait depression and anxiety scores, although not all associations reached the pre-set level of significance. The present study again found negative correlations between parental care and mood scores, and some positive correlations between parental overprotection and mood scores when assessment was made against natural parents only.

When comparison was made between broad types of maternal bonding it was observed that the lowest depression and anxiety scores were returned by those who perceived their mothers as caring but not overprotective; in contrast, the highest mood scores were returned by those who perceived their mothers as deficient in care and as overprotective. Similar differences were found in respect to fathers, but were less pronounced.

These results confirm the findings of that earlier study linking distortions in reported parental characteristics to higher anxiety and depression scores in a non-clinical group. However, the design of the present study allows the relative influence of parental care and parental overprotection, and the relative influence of maternal and paternal characteristics, on mood levels to be assessed. Maternal care scores were the only significant predictor of levels of depression, while maternal care and maternal overprotection scores were both significant predictors of levels of anxiety. Maternal influences appear clearly more influential than paternal influences.

It is self-evident that the demonstration of several associations does not, by itself, establish causality. Several explanations of the present findings will be
considered. First, that those scoring higher on the mood scales might, as a consequence of their mood, tend to judge parental relationships negatively. If valid, it might be expected that those with higher mood scores would reflect that negative set in both scoring their mothers and their fathers. However, results linked mood levels with maternal characteristics and only weakly linked them with paternal characteristics. While that explanation seems unlikely further research is being conducted to determine if mood levels influence the way in which subjects score their parents on the PBI.

Secondly, it is conceivable that those with an anxious temperament might elicit less maternal care and greater maternal overprotection, and that those with a depressive temperament might elicit less maternal care. Again, it is hard to explain why such characteristics would not influence paternal characteristics also.

Thirdly, associations can be spurious ones reflecting higher levels of neuroticism in parents and children as a consequence of a genetic influence. Higher neuroticism in a parent might reduce the parent’s caring capacity and encourage him or her to be overprotective, while higher neuroticism in the child would be manifested by higher levels of anxiety and depression. But those parental characteristics would not then be causal influences per se.

Fourthly, decrements in parental care and parental overprotection may be antecedent causes of higher levels of anxiety and depression in a child, and several possible mechanisms have been outlined in previous publications (Parker, 1978; Parker, 1979).

Further research is being conducted to examine the several explanations in non-clinical and psychiatric patient groups. The difficulties in interpreting the associations demonstrated in this paper would be recognized by clinicians attempting to answer a patient’s enquiries as to whether earlier paternal characteristics have any relation to his or her current distress.
Acknowledgements

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References


