*Brit. J. Psychiat.* (1972), **120**, 615–21

# Interpersonal Patterns in Alcoholic Marriages

By J. B. RAE and J. DREWERY

In a previous study (Drewery and Rae, 1969), using the Interpersonal Perception Technique (I.P.T.) (Drewery, 1969), it was found that while the husbands and wives of the non-patient marriages had a clear concept of masculinity which they shared, the partners in the alcoholic marriages lacked this consensus; they were confused about the male socio-sexual role, and this confusion expressed itself in a conflictful interplay of dependence and independence needs. The conclusions then reported were applied to alcoholic marriages as if they formed a homogeneous group. The present study was designed to test the hypothesis that when alcoholic marriages are dichotomized in terms of the wives' Pd characteristics, two qualitatively and quantitatively distinct marital patterns would be revealed.

Three hypotheses were formulated. It was predicted that:

1. The marriages of patients with Non-Pd wives will, in terms of the I.P.T. measures, approximate to control marriages.

2. The marriages of patients with Pd wives will be more abnormal, in terms of I.P.T. measures, than both the control marriages and those of patients with Non-Pd wives.

3. The abnormality will be expressed in terms of sexual role confusion and dependence-independence conflict.

## Subjects

The experimental sample comprised 33 male alcoholics and their wives. Of these 33 couples, 18 had formed part of the patient sample in our earlier report (Drewery and Rae, 1969). There had been 22 patients in this earlier sample, but of these 4 had to be omitted from the present study because complete M.M.P.I. data was not available. All patients in the present sample were intelligent middle-class men admitted to an amenity bed ward; patients who were brain-damaged or psychotic were excluded. The mean age of the husbands was 46·5, s.d. 6·61; of the wives 44·4, s.d. 6·98, and the mean duration of marriage 17·86 years, s.d. 7·5. The control group for this study was a fairly representative sample of 51 non-psychiatric volunteer married couples from the town of Dumfries. Husbands' mean age was 42·44 years, s.d. 6·90; wives' mean age 40·27 years, s.d. 6·55; and mean duration of marriage 16·63 years, s.d. 5·90. The difference in duration of marriage between the two groups was not significant. However, both the patients and their wives were significantly older than the controls ($P = \cdot 02$). If marital age proved to be significantly associated with the I.P.T. measures which most clearly differentiate between patients and controls then the clinical significance of the results which follow would be vitiated. To discount this possibility we correlated the marital age of the controls with each of the 7 I.P.T. measures. We further correlated both husbands' age and wives' age with each of the 15 variables of the Edwards Personal Preference Schedule (E.P.P.S.). None of these 37 correlations was statistically significant. We can therefore disregard the possibility that the age differences between the group contributed to the obtained differences between them.

Social class was normally distributed in the control group, except for Class V which was scarcely represented, while the patients were social classes I and II. We have some evidence that social classes I and II score higher on certain of the I.P.T. measures, and so our present fairly representative control group would lead to reduced differences between patients and controls, making our hypotheses more difficult to establish. Despite this the other scientific advantages of using as large a sample of the community as possible persuaded us to



https://doi.org/10.1192/bjp.120.559.615 Published online by Cambridge University Press

use all our 51 couples as the comparison group.

### Procedure

The M.M.P.I. (Welsh and Dahlstrom, 1960) and the I.P.T. (Drewery, 1969) were administered to both the patient and his wife. This was done after the more immediate toxic effects of his drinking had cleared up, usually three to four weeks after admission. We took the Psychopathic Deviate Scale (Pd) as our criterion measure and divided the wives of the patients about their median, a T score of 56. In 17 couples the wives' Pd scores were above the median and formed the Pd group, and in the remaining 16 couples the scores were below the median and comprised the Non-Pd (NPd) group*.

The I.P.T. has been described in detail elsewhere (Drewery, 1969). The correlational measures deriving from the I.P.T. have been calculated for Controls, NPd and Pd marriages.

### Results

*Mean correlation analysis*

Table I compares the mean correlation coefficients for control marriages, NPd marriages and Pd marriages.

Table I clearly confirms Hypothesis 1, that is, NPd marriages will approximate to those of control women. Only on the crucial (A × B1) measure—the comparison between how a husband describes himself and is described by his wife—are the control and NPd groups statistically different. Indeed, the patient NPd marriages consistently achieve marginally higher scores than the non-patient control marriages.

Hypothesis 2, that is that Pd marriages are the most abnormal, is also amply confirmed. In Table I the comparison between control and Pd marriages, also between NPd and Pd marriages present, highly significant differences, eight of the twelve comparisons having P values of less than 0·025 by one-tailed test. Our previous study (*op. cit.*) has led us to anticipate that two of the directly predictive measures (A1 × B2) and (B1 × A2) would not discriminate between alcoholic and control marriages; that is, both wives and husbands are successful in predicting how they are perceived by their spouse, and patients are as skilful in this as controls. The failure in the disturbed patient marriages, notably the Pd marriages, lies in the poor match between self-descriptions and spouse descriptions, (A × B1) and (B × A1) both being low, and the failure on the part of the patient couples to anticipate this poor match (A × A2), and (B × B2) both high.

### Sexual Role Confusion

To test the third hypothesis, use is made of the significant difference shown in the E.P.P.S. between the mean scores of men and women on each of the fifteen traits the test measures (Edwards, 1959). In the present study the

* Rae's (1972) criterion for Pd and NPd in his follow-up study was rather different. The criterion used in this paper is simpler and has a number of psychometric advantages. Rae has reworked his follow-up data using this new criterion and his findings are virtually identical.

Table I

*Mean product-moment correlation coefficients for each of the 6 I.P.T. measures. A comparison between the Controls and the Wives Pd and Non-Pd groups*

| | Column 1 Control | Column 2 Non-Pd | Column 3 Pd | Significance of difference between Columns 1 and 2 | Columns 2 and 3 | Columns 1 and 3 |
|---|---|---|---|---|---|---|
| A × B1 | ·50 | ·36 | ·18 | p = ·025 | p = ·025 | p = ·0005 |
| B × A1 | ·53 | ·58 | ·28 | N.S. | p = ·0005 | p = ·0005 |
| A1 × B2 | ·51 | ·57 | ·42 | N.S. | p = ·025 | N.S. |
| B1 × A2 | ·51 | ·52 | ·55 | N.S. | N.S. | N.S. |
| B × B2 | ·71 | ·72 | ·63 | N.S. | N.S. | p = ·025 |
| A × A2 | ·68 | ·69 | ·55 | N.S. | p = ·0125 | p = ·005 |

Controls—N=51 couples; Pd group—N=17 couples; Non-Pd Group—N =16 couples.

https://doi.org/10.1192/bjp.120.559.615 Published online by Cambridge University Press

control group is sufficiently large and representative to replace the American norms formerly used as the criterion of sexual appropriateness (Drewery and Rae, 1969), and so in the analysis which follows a 'masculine' trait is defined as one in which our control men score higher than our control women, and a 'feminine' trait one in which control women score higher than control men. This change of criterion from a large American sample to a relatively small Scottish sample is less drastic than it appears, since on only two of the fifteen traits, Change and Endurance, did our male and female controls differ in direction from the American sample; and indeed the results which follow would have been as striking had we retained the original American criterion for sexual appropriateness.

*Procedure*

When we compare the mean trait scores of our control husbands and wives on the E.P.P.S., we find that women are *lower* on Achievement, Exhibition, Autonomy, Dominance, Change, Heterosexuality and Aggression and *higher* on Deference, Order, Affiliation, Intraception, Succorance, Abasement, Nurturance and Endurance. These differences now become the criterion directions for masculinity and femininity and we proceed to calculate Wilcoxon matched-pairs signed-ranks tests in order to determine whether either of our two patient groups is significantly more or less masculine or more or less feminine than our control couples.

The most important of these comparisons are presented in Fig. 1 in the form of an analogue scale. Perhaps an examination of Fig. 1 A, which is the men's self-descriptions, will clarify this illustrative device. The scale extends to 30 units, 15 in the feminine direction and 15 in the masculine direction. The control mean scores stand at the mid-point, and using the controls as the criterion group we find that

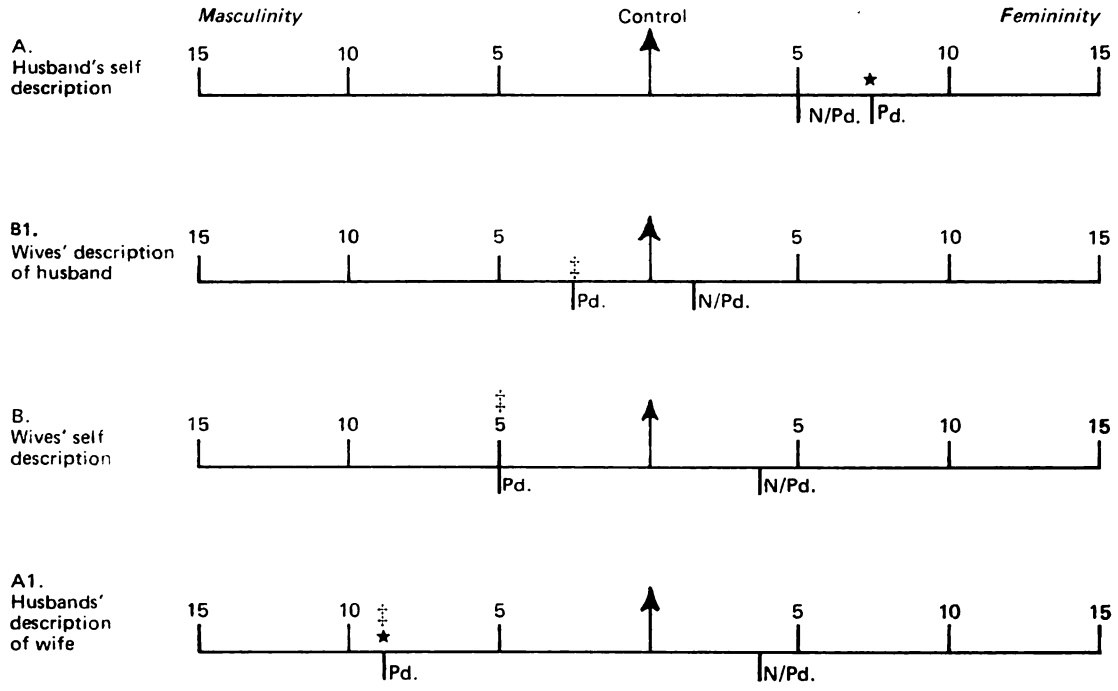



FIG. 1

https://doi.org/10.1192/bjp.120.559.615 Published online by Cambridge University Press

the men in the Pd group have 11 traits in which they are more feminine than the control men and 4 in which they are more masculine. Their position on the scale is therefore 7 traits (or scale units) more feminine than the controls. This difference is significant at the P = ·005 level using the Wilcoxon test. (This test takes into account the size as well as the direction of differences.) Similarly, the men in the NPd group are five units more feminine than the controls, but neither this difference nor the difference between Pd and NPd groups is significant. Figure 1 B1 indicates that, compared with control wives, wives of patients do not perceive their husbands as significantly more or less masculine, but Pd wives see their husbands as rather more masculine than controls and as significantly more *masculine* than the descriptions of NPd wives. We know that men married to Pd wives see themselves as markedly more *feminine* than controls, so their wives' concept of them is notably discrepant. Thus the very poor (A × B1) Pd group match already noted in Table I is now seen to have as one of its components disagreement on this masculine-feminine dimension.

Turning to the wives' self-descriptions, Fig. 1 B reveals that, while the wives of the two patient groups are not significantly different from control wives, Pd women see themselves as significantly more masculine than NPd women. The husbands of the Pd women have a markedly masculine concept of their wives (Fig. 1 A1) while the NPd husbands do not differ from the controls.

Summarizing this section, the Pd marriages are strikingly deviant in their sexual identification. The men see themselves as feminine and their wives see themselves as masculine. The Pd spouse percepts add to this confusion, since the husbands agree that their wives are masculine while the Pd wives deny that their husbands are feminine. The NPd marriages, on the other hand, are not significantly different from control marriages on any of these masculinity/feminity comparisons, but they almost invariably can be clearly distinguished from Pd marriages. These findings lend support to our three central hypotheses, and are particularly relevant to the third.

## Dependence-Independence Conflict

Table II condenses a good deal of information which in our earlier work (*op. cit.*) we presented graphically.

Table II presents group data on three of the I.P.T. measures analysed by trait: (A × B1), the match between the husbands' self descriptions and their wives' descriptions of them; (B × A1), the comparison between wives' self-descriptions and their husbands' descriptions of them; and (A × B), the actual similarity between the self descriptions of husbands and the self descriptions of wives. The similarity between these descriptions is expressed both by a rank order correlation between mean trait scores on the fifteen E.P.P.S. variables and by median tests calculated for each of the fifteen traits. Thus in Table II, for the (A × B1)

Table II

*Trait profile relationships on three I.P.T. measures for controls PD and non-PD marriages*

| | A × B1 | | | B × A1 | | | A × B | | |
|---|---|---|---|---|---|---|---|---|---|
| | Control | Non-Pd | Pd | Control | Non-Pd | Pd | Control | Non-Pd | Pd |
| | Rho = ·77 P = ·001 | Rho = ·64 P = ·01 | Rho = −·05 N.S. | Rho = ·75 P = ·01 | Rho = ·80 P = ·001 | Rho = ·04 N.S. | Rho = ·44 N.S. | Rho = ·07 N.S. | Rho = ·44 N.S. | |
| Achievement | | | ·05 B1 | | | | | ·03 A | | Ach. |
| Deference | | | | | ·05 B | | | ·0005 B | | Def. |
| Order | | | | | | | ·05 B | | | Ord. |
| Exhibition | | | | | | | | | | Exh. |
| Autonomy | ·05 B1 | | ·03 B1 | | | | ·05 A | | | Aut. |
| Affiliation | | | | | | | ·05 B | | ·03 B | Aff. |
| Intraception | | | ·05 A | | | ·005 B | | ·05 B | | Int. |
| Succorance | | | ·03 B1 | | | ·03 A1 | | | | Suc. |
| Dominance | | | | | | ·0005 A1 | ·0005 A | ·03 A | ·0005 A | Dom. |
| Abasement | | | | | | ·005 B | ·05 B | | | Aba. |
| Nurturance | | | | | | | ·05 B | | | Nur. |
| Change | | | | | | | | | | Chg. |
| Endurance | | | | | | | | | | End. |
| Heterosex | | | | | | | | | | Het. |
| Aggression | | ·05 B1 | ·03 B1 | | | ·03 A1 | ·05 A | | | Agg. |

https://doi.org/10.1192/bjp.120.559.615 Published online by Cambridge University Press

comparison the control rank order correlation is rho = ·77, and only on Autonomy is there a significant difference between husbands' and wives' descriptions. (The ·05 B1 opposite Autonomy in Table II indicates that wives see their husbands (B1) as significantly more autonomous (p = ·05) than their husbands see themselves.) Similarly for the NPd alcoholic group there is a highly significant match between A and B1, rho = ·64, and again only on one trait are the two descriptions significantly different. When we come to the Pd group of alcholics, however, there is no relationship between A and B1, rho = — ·05, and five of the trait differences are significant.

Table II lends further weight to Hypotheses 1 and 2. The control and NPd groups behave similarly, while the Pd group is markedly different from both. If we study the significant trait difference in the Pd group, it will be seen that the Pd wives not only perceive their husbands as significantly more Achieving, more Aggressive and more Autonomous, but at the same time see them as more in need of help (Succorant). These alcoholic patients are thus perceived as in conflict about their dependence and independence needs. For their part, the men married to Pd wives perceive their wives as much more Dominant and extrapunitively hostile (Aggressive), while at the same time more in need of help (Succorant). These patients married to Pd wives perceive them as in conflict about their need for aggressive dominance and their need for help. This may be the form in which men construe a dependence–independence conflict in women.

## Indices of Dependence and Independence

The development of quantitative indices of dependence and independence could be of considerable clinical application. The aim would be to obtain a single measure expressing the balance of dependence and independence both in an individual and in a marriage.

### *Method*

Selecting those traits which in our clinical experience were most intimately related to independence and dependence we summed an individual's raw scores on Autonomy, Dominance and Aggression and calculated the mean. Then we calculated the mean raw score for Affiliation and Succorance summed, and called these measures the 'Independence' and the 'Dependence' scores respectively*.

### *Results*

Our control men as a group were significantly higher on Independence than Dependence; they expected to be seen in this way and in fact were so seen by their wives. None of the three P values for a 't' test fell below P = < ·0005. Similarly, our control wives were significantly higher on Dependence than Independence; they expected to be seen in this way by their husbands, who in fact confirmed their expectation; P values ranged from P = < ·02 to P = < ·0005. However, when we compared the control and patient groups on mean Independence or mean Dependence scores they differed very little, and it was clear that it was the *balance* between Dependence and Independence in an individual or in a marriage which was critical.

## Dependence-Independence Difference Score

### *Method*

In order to measure the balance of Dependence and Independence in both the individuals and the marriages studied we calculated a Dependence/Independence Difference Score for each individual by subtracting the smaller of his two scores from the larger. This Difference score was labelled with a positive or a negative sign, depending on the sexual appropriateness of the direction of the difference. Thus, a Difference Score for a man would be labelled plus when Independence was greater

* It might be thought that these Independence and Dependence measures are redundant since they are simply another way of expressing the differences established in the Masculinity/Femininity section above. One cannot dismiss such a notion entirely, since in our culture measures of independence are likely to be correlated with measures of masculinity, but Table II at least demonstrates that we have not simply aggregated the variables which most significantly discriminate between men and women, and indeed we have included one, Succorance, which does not significantly distinguish between men and women.

https://doi.org/10.1192/bjp.120.559.615 Published online by Cambridge University Press

than Dependence and minus when the contrary was the case. Difference scores were calculated for all subjects in the study, using both self descriptions, A and B, and spouse percepts, A1 and B1. We ranked each of the three groups in terms of their Dependence/Independence Difference Scores for A; B; A1; and B1, and carried out Wilcoxon matched-pairs signed-ranks tests.

*Results*

The control men were strikingly more Independent than Dependent and the control women very much more Dependent than Independent, and were so perceived by their spouses. The significance levels were all in excess of $P = < \cdot 008$. Wilcoxon tests for both groups of male patients were not significant, confirming their conflict about their Dependence/Independence needs. The Pd wives' perception of their husbands accepted the reality of this conflict, while the NPd wives perceived their husbands as significantly moreIndependent than Dependent ($P = < \cdot 05$). The Pd wives describe themselves as *not* being more Dependent than Independent, and this role conflict is confirmed by their husbands. The NPd wives on the other hand describe themselves as significantly Dependent ($P = < \cdot 01$) and are seen in this way by their husbands ($P = < \cdot 01$).

These findings lend further support to all three hypotheses, and clarify the important ($A \times B1$) measure. We have seen in Table I that ($A \times B1$) is the only measure on which NPd and Control marriages are significantly different. It now seems clear that the poor match between A and B1 in the NPd marriages arises out of the wives' perception of their husbands as strikingly more independent than dependent, a view which the husbands do not share. This denial by the wife of her husband's dependence and overstatement of his independence may be important for his therapeutic success.

## Discussion

The present study supports and elaborates the findings of Drewery and Rae (1969) that male alcoholics are confused about their marital socio-sexual role. In terms of the concepts generated in this study they are more 'feminine' than control men and more conflictful about the resolution of their needs for Dependence and Independence. We have shown that if the alcoholic is fortunate enough to be married to a NPd wife the pattern of his marriage is remarkably similar to that of control marriages. It would appear that such stability has been achieved through the efforts of a woman who is able to perceive her husband as masculine and independent despite his obvious inadequacies, and to see herself as highly feminine and dependent notwithstanding the burdens and responsibilities of living with an alcoholic for many years. These NPd marriages must be regarded as socio-sexually appropriate. Rae (1972) has demonstrated that the alcoholic with a NPd wife has an excellent prognosis. We infer that a major factor in his success is that his marriage to a 'feminine' woman fosters the emergence of what our society accepts as masculine patterns of behaviour. When they appear they are reinforced by his wife who accepts and indeed welcomes them. This helps him to resolve his ambivalent dependency needs in favour of independence.

The alcoholic married to a Pd wife, however, is involved in a relationship the pathological quality of which makes it virtually impossible for him to resolve his socio-sexual ambiguities appropriately, and we consider that his extremely poor prognosis (Rae, 1972) is related to this fact. His Pd wife is herself 'masculine' and in conflict about her own dependency needs. Thus their relationship is competitive rather than complementary and such a sexually threatening relationship must undermine any effort the husband makes to establish himself in the masculine role in the marriage. The wife's pathological need for an emasculated husband is dramatized by the frequency with which Pd women become psychiatrically ill in the albeit unlikely event of their husbands achieving sobriety (Rae, 1972).

This study was designed to focus attention on the importance of the role played by the wives of alcoholics in their marital adjustment. However, in any dyadic relationship both

https://doi.org/10.1192/bjp.120.559.615 Published online by Cambridge University Press

members are of equal importance, and we are well aware of the necessity of evaluating the husband's contribution to the marital relationship. Indeed we have carried out a parallel analysis to the one reported here of these patients' marriages dichotomized in terms of the *husbands'* Pd scores. The marriages of the Pd men are much more disturbed in I.P.T. terms than those of NPd men. Further, when we look at the small sample of the marriages of Pd men married to Pd women and compare them with marriages in which both partners are NPd the differences are gross and reflect the severe marital disturbance of Pd–Pd marriages and the marital stability of the NPd–NPd marriages.

A final paradox remains to be explained. Rae (1972) states that although the patients' Pd characteristics are related to clinical evidence of social and marital disturbance (and we have just produced psychometric evidence confirming this relationship with marital stress), they are *not* related to treatment outcome. We account for this by subscribing to Parson and Bales' (1955) concept of masculine and feminine roles. For these authors the male role is essentially executive and instrumental, while the feminine role is more supportive, integrative and tension-reducing. Interpreting this in the present context, it is a wife's function to accept her husband partly on his own terms and partly in terms of the concept of masculinity endorsed by her social group, and to make any of the social and emotional adjustments which follow from this acceptance. This notion is, of course, central to an understanding of the importance of our (A × B1) measure. Our NPd wife is highly skilled in this role, so that although her marriage may be disturbed, particularly if she is married to an alcohoic Pd husband, she is nonetheless able to support him in the way we have described as he struggles to achieve a sober and stable way of life. The Pd wife has clearly not accepted this feminine role, and so her husband lacks the kind of support and encouragement we have described earlier and so tends to relapse into alcoholism when all other attempted solutions fail.

## Summary

The marital patterns of 51 fairly representative non-psychiatric control couples are compared with the marital patterns of 33 male alcoholics in hospital using the Interpersonal Perception Technique. The alcoholic marriages are divided according to the characteristics shown in the Pd scale of the M.M.P.I. into a Pd group and a NPd group. NPd marriages closely resemble control marriages, while Pd marriages are grossly deviant. The nature of the deviation can be accounted for in terms of confusion of socio-sexual roles and dependence-independence needs within the marriage. The relationship between marital patterns and the prognosis in alcoholism is discussed.

## References

Drewery, J. (1969). 'An interpersonal perception technique.' *British Journal of Medical Psychology*, **42**, 171.

—— and Rae, J. B. (1969). 'A group comparison of alcoholic and non-psychiatric marriages using the interpersonal perception technique.' *British Journal of Psychiatry*, **115**, 287–300.

Edwards, A. (1959). *Edwards' Personal Preference Schedule (Manual)*. New York: Psychological Corporation.

Parsons, T., and Bales, R. F. (1955). *Family, Socialization and Interaction Process*. Glencoe, Ill.: Free Press.

Rae, J. B. (1972). 'The influence of the wives on the treatment outcome of male alcoholics—a follow-up study at two years.' *British Journal of Psychiatry*, **120**, 601–13.

—— and Forbes, A. R. (1966). 'Clinical and psychometric characteristics of the wives of alcoholics.' *British Journal of Psychiatry*, **112**, 197–200.

Welsh, G. S., and Dahlstrom, W. G. (1960). *Basic Readings on the M.M.P.I.* University Minnesota Press, Minneapolis.

A synopsis of this paper was published in the November 1971 *Journal*.

John B. Rae, T.D., M.B., Ch.B., M.R.C.Psych., *Consultant Psychiatrist, Bangour Village Hospital, Broxburn, West Lothian, Scotland*

James Drewery, M.A., F.B.Ps.S., *Department of Psychological Research, Crichton Royal, Dumfries*

(*Received 18 January 1971*)

https://doi.org/10.1192/bjp.120.559.615 Published online by Cambridge University Press