

Appendix IV

Effect of Initial Response

HERE WE EXAMINE the possible effect of the initial response on the final twenty-five responses in all available data, including data on games VI through X, not discussed elsewhere in this study. This gives us 410 pairs in all. In Matrix (a) the rows represent the initial responses *CC*, *DD*, or *N* (*CD* or *DC*); the columns, the lock-ins, if any, *N* signifying no lock-in. As usual we call the final twenty-five responses locked in if twenty-three or more of them are either *CC* or *DD*. In three instances the final twenty-five responses were all *CD* or all *DC*. These are included with *N*. The entries of the matrix are numbers of pairs in each category of lock-in.

		Final			
		<i>CC</i>	<i>N</i>	<i>DD</i>	
{	<i>CC</i>	55	46	24	125
	<i>N</i>	85	71	40	196
	<i>DD</i>	29	32	28	89
		169	149	92	410

Matrix (a).

Matrix (b) shows the corresponding expected numbers under the null hypothesis, namely that the category of the last twenty-five responses is not related to the initial response.

The differences are in the expected direction. Somewhat more than expected *CC* lock-ins follow initial *CC* responses and somewhat more than expected *DD* lock-ins follow initial *DD* responses. However, χ^2 turns out

	CC	N	DD
CC	51	46	28
N	81	71	44
DD	37	32	20

Matrix (b).

to be 6.39, which for four degrees of freedom is only at about .20 level of significance. This result does not speak for the rejection of the null hypothesis.

If we confine ourselves only to the "extremes," i.e., initial *CC* and *DD* responses and final lock-ins, we obtain the following matrix.

	CC	DD	
CC	55	24	79
DD	29	28	57
	84	52	136

Matrix (c).

The expected matrix is

	CC	DD
CC	49	30
DD	35	22

Matrix (d).

The value of χ^2 is now 4.61, which for one degree of freedom is at .03 level of significance. Therefore it is reasonable to assume that the initial response, if it is *CC* or *DD*, does have some effect on the character of the final lock-in. The relative chi-square, that is $\chi^2/N = 4.61/79$ or .06, is not large; hence the influence of the initial response on the final responses must be considered small. This influence can be attributed to either the com-

mon effect of the players' inherent cooperative propensities on both the initial and the final responses or to some impetus given by the initial response to the nature of the subsequent interactions.