Reviewer's report

Title: Family-based clusters of cognitive test performance in familial schizophrenia

Version: 3 Date: 17 June 2004

Reviewer: William Horan

Reviewer's report:

The authors' revisions have improved this manuscript. In particular, the description of the clustering and visualization procedure is clearer and the limitations of the results are more explicitly acknowledged. The points raised in my original review have generally been addressed. A few brief comments about the revised manuscript:

1) The authors now emphasize certain diagnostic differences in probands and family members in an effort to validate the clusters. Specifically, “…the impaired cluster did not include any subjects with affective psychotic disorders, whereas in the well performing and in the intermediate cluster, these diagnoses were assigned for 14 % and 11 % of the family members, respectively. Furthermore, the impaired cluster comprised merely those patients from the schizophrenia spectrum that suffered from pure schizophrenia, along with their unaffected family.” It would be useful to report whether the rates of affective psychotic disorders were statistically different across disorders. It might also be useful to discuss how these findings could be interpreted as supporting the validity of the clusters.

2) Figure 1 has been added to help the reader understand the clustering procedure. I did not find this new figure added much to the generally clear description of the overall steps that the analyses follow. The stage in the process that I find more difficult to grasp is exactly how the inter-cluster distance is determined. On p. 6 the authors write, “In the sense of this distance measure, two clusters are close when all subjects in both clusters are close”. If the authors choose to conduct further text revisions, this particular aspect of the procedure might be more fully described.

What next?: Accept after discretionary revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

None