

MASTER'S SEMINAR ANNOUNCEMENT  
Department of Statistics

## **The Diagnosis of Schizophrenia: Temporal Stability and Change**

Wednesday, November 12, 2003, 1:30 pm  
Eckhart Hall, Room 110, 5734 S. University Avenue

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### **ABSTRACT**

Schizophrenia is considered a lifetime disorder, but in practice its diagnosis in a given patient can change over time. This study used a large clinical data that consisted of 4725 adult inpatients who had been admitted to hospitals twice to study the temporal stability of diagnosis of schizophrenia and to examine the change in the diagnosis between the two occasions. First, we measured temporal stability of diagnosis of schizophrenia using kappa coefficient which represents the amount of agreement adjusted by chance. Second, we examined change in the diagnosis. A logistic model for matched pairs was used to examine lack of marginal homogeneity and to check for dependence of the odds ratio on doctor type (3 categories, same doctors, different doctors at same medical centers and different doctors at different centers), sex and race. Loglinear symmetry and quasi-symmetry models were fitted to study the mobility in the diagnoses between schizophrenia only, schizoaffective disorder only and none of the two diagnoses. We focused on the loglinear models represented by the design matrix, which has the flexibility of allowing specific constraints to be imposed and to test for particular sources of group difference in change. Group-specific parameters were simultaneously estimated. Thus, questions of how the patterns of change in the diagnosis differ across sex, race and doctor type can be studied.