Assignment 6 — Due Dec 6, 2018

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1. The following data were collected in a study of the relation between parental socioeconomic status (SES) and the mental health of children. Any systematic variation is of interest. Analyze the data and write a brief report.

3. Table 1 gives the mean number of children born per woman, the women being classified by place, education, and years since first marriage. Any systematic variation in the number of children is of interest. See fiji.txt for the dataset.

(a) Fit an appropriate model describing how the number of children varies with marital age, mother’s abode and education. Give a brief synopsis of the arguments justifying your formulation and choice of model, including checks for model adequacy.

(b) Explain the meaning of all parameters in your model. Comment on the major factors affecting fertility.

(c) Construct a 95% confidence interval for the mean number of children born to an urban woman with upper elementary education after ten years of marriage.

(d) Estimate the lifetime average number of children born to rural women with secondary education. Give 90% confidence limits.