

## Statistics 4590: Student Survey Data

Reference: Chase, M. A., and Dummer, G. M. (1992). The Role of Sports as a Social Determinant for Children. *Research Quarterly for Exercise and Sport* **63**, p. 418–424.

This dataset consists of 478 students in grades 4–6 from three school districts in Ingham and Clinton Counties, Michigan. Chase and Dummer (1992) stratified their sample, selecting students from urban, suburban, and rural school districts with approximately 1/3 of their sample coming from each district. Students indicated whether good grades, athletic ability, or popularity was most important to them. They also ranked four factors: grades, sports, looks, and money, in order of their importance for popularity. The questionnaire also asked for gender, grade level, and other demographic information.

The variables in the dataset are as follows:

1. Gender: Boy or girl
2. Grade: 4, 5 or 6
3. Age: Age in years
4. Race: White, Other
5. Urban/Rural: Rural, Suburban, or Urban school district
6. School: Brentwood Elementary, Brentwood Middle, Ridge, Sand, Eureka, Brown, Main, Portage, Westdale Middle.
7. Goals: Student's choice in the personal goals question where options were 1 = Make Good Grades, 2 = Be Popular, 3 = Be Good in Sports
8. Grades: Rank of “make good grades” (1 = most important for popularity, 4 = least important)
9. Sports: Rank of “being good at sports” (1 = most important for popularity, 4=least important)
10. Looks: Rank of “being handsome or pretty” (1 = most important for popularity, 4=least important)
11. Money: Rank of “having lots of money” (1 = most important for popularity, 4 = least important)

The data is on the course website, and can be read into R using the **read.table** command. Analyze this dataset to answer the following questions of interest:

1. Are a student's goals associated with school district?
2. Are goals associated with gender? How much more likely is it for males to have a goal of being good is sports than females?
3. Is the ranking of money associated with school district?

When answering these questions, be sure to address the issue of whether these associations are “real”, or could other variables be confounding the results.