

# Computer Rage: Theory and Practice

Kent L. Norman

HCIL-V and the Department of Psychology

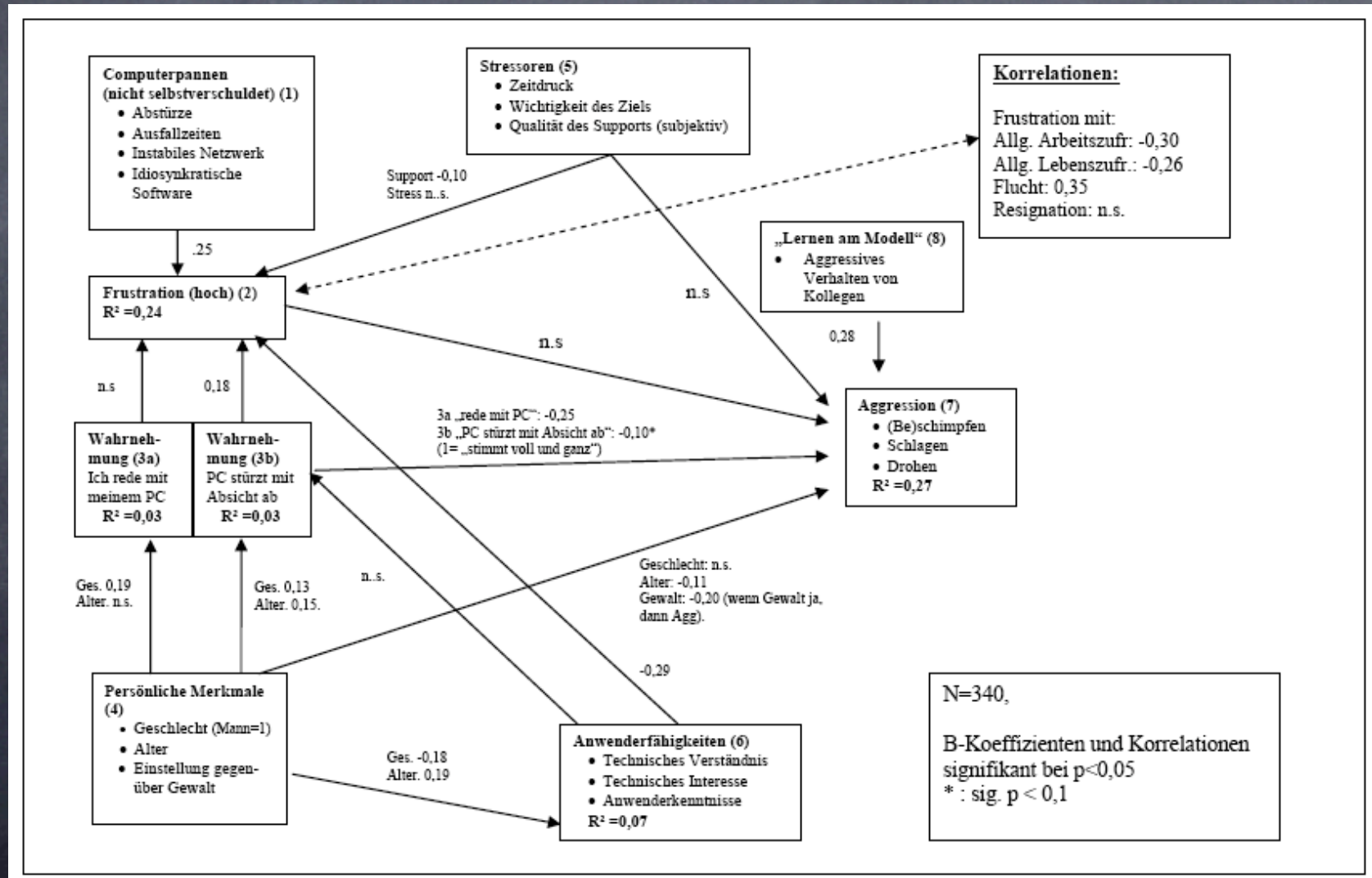
October 21, 2004



# What is Computer Rage

- Physical Bashing of a Computer and/or a Computer Related Item
- Verbal Abuse of a Computer and/or a Computer Related Item (Brinks, 2004)
- Heightened Physiological Response with Associated Feelings of Anger and Frustration (Lazar, Jones, Bessiere, Ceaparu, & Shneiderman, 2004)

# Full Theory of Computer Rage



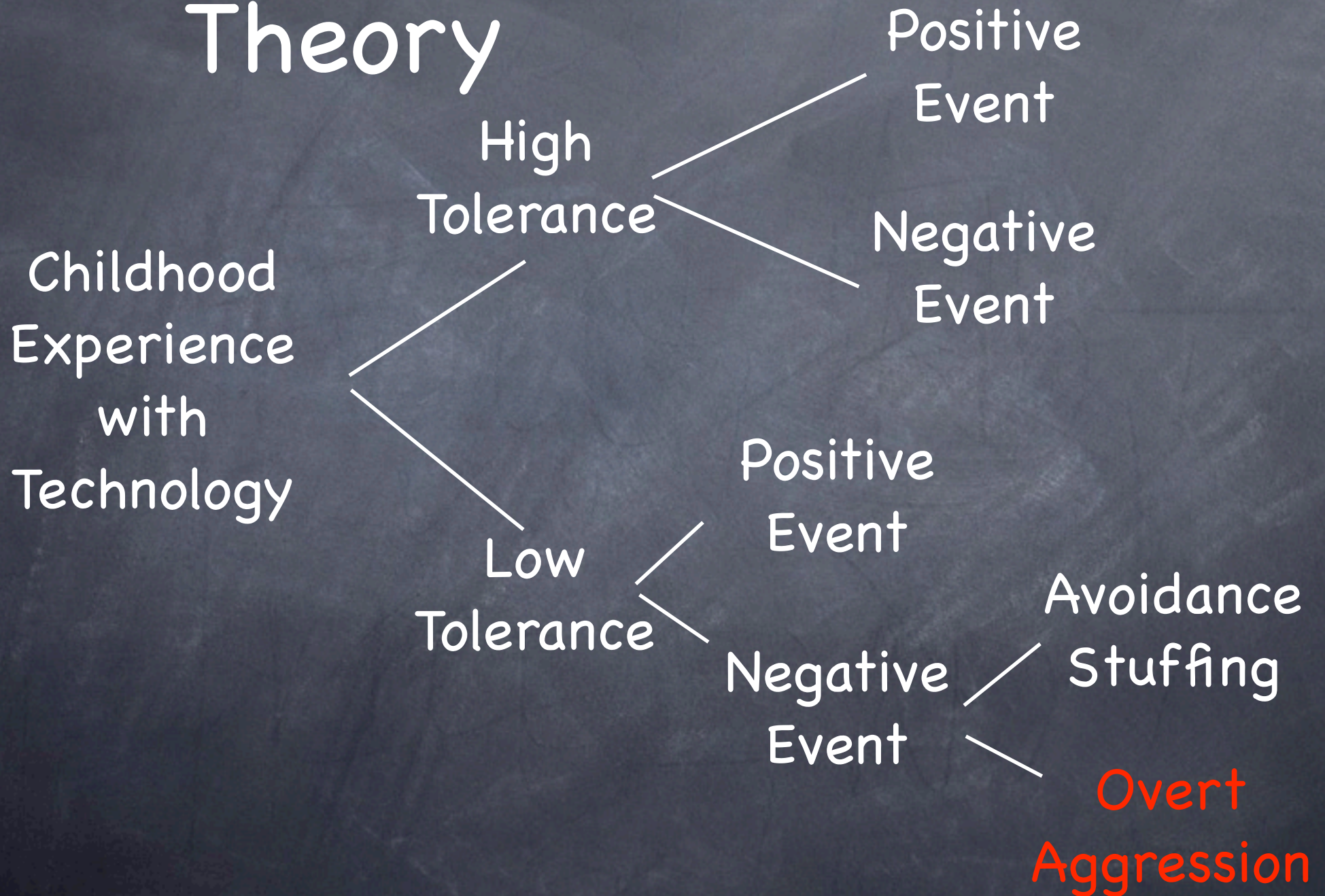


# Simple Theory of Computer Rage

Microsoft  Rage



# Developmental Theory



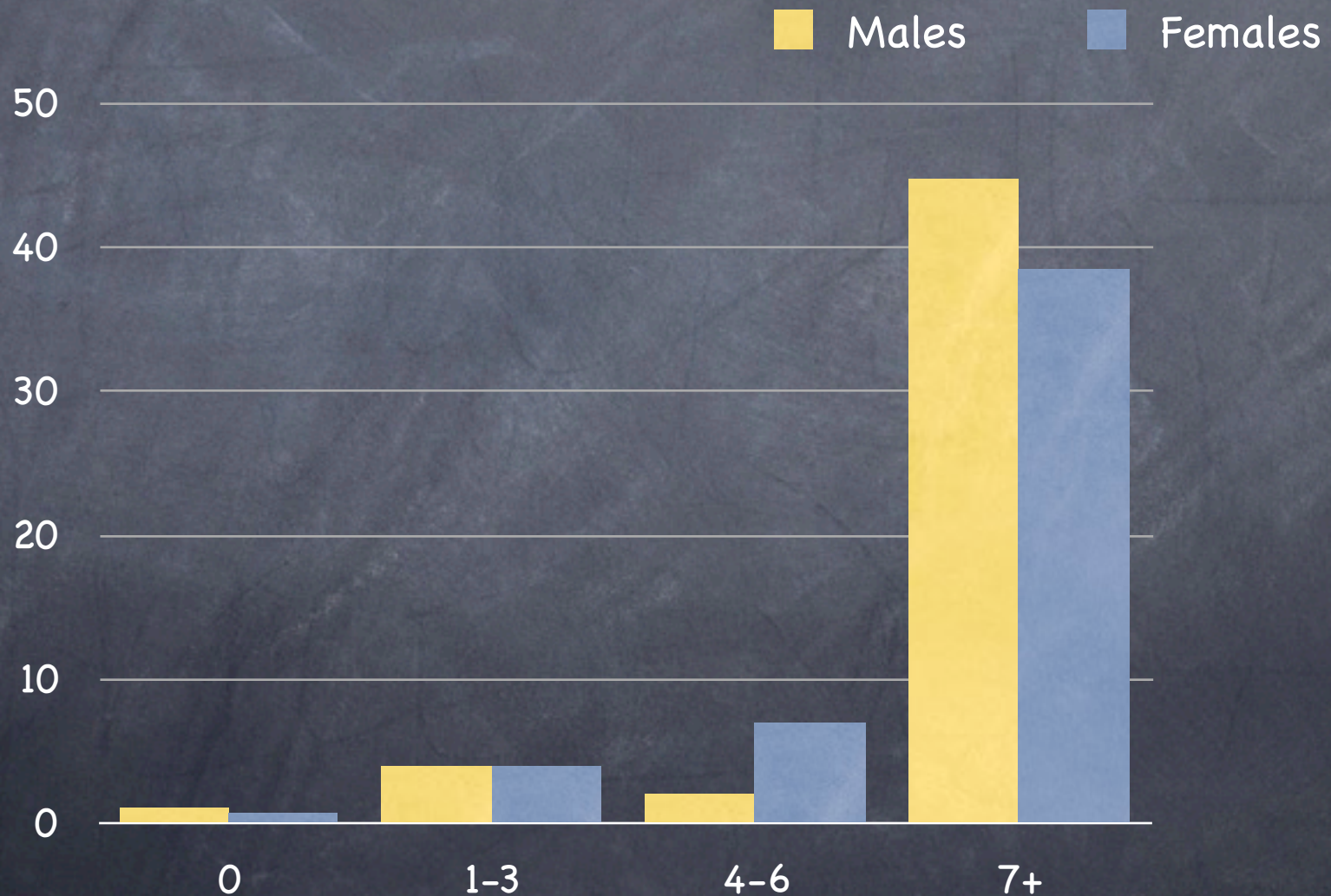


# Online Survey Sample

- [lap.umd.edu/computer\\_rage](http://lap.umd.edu/computer_rage)
- US sample N = 162

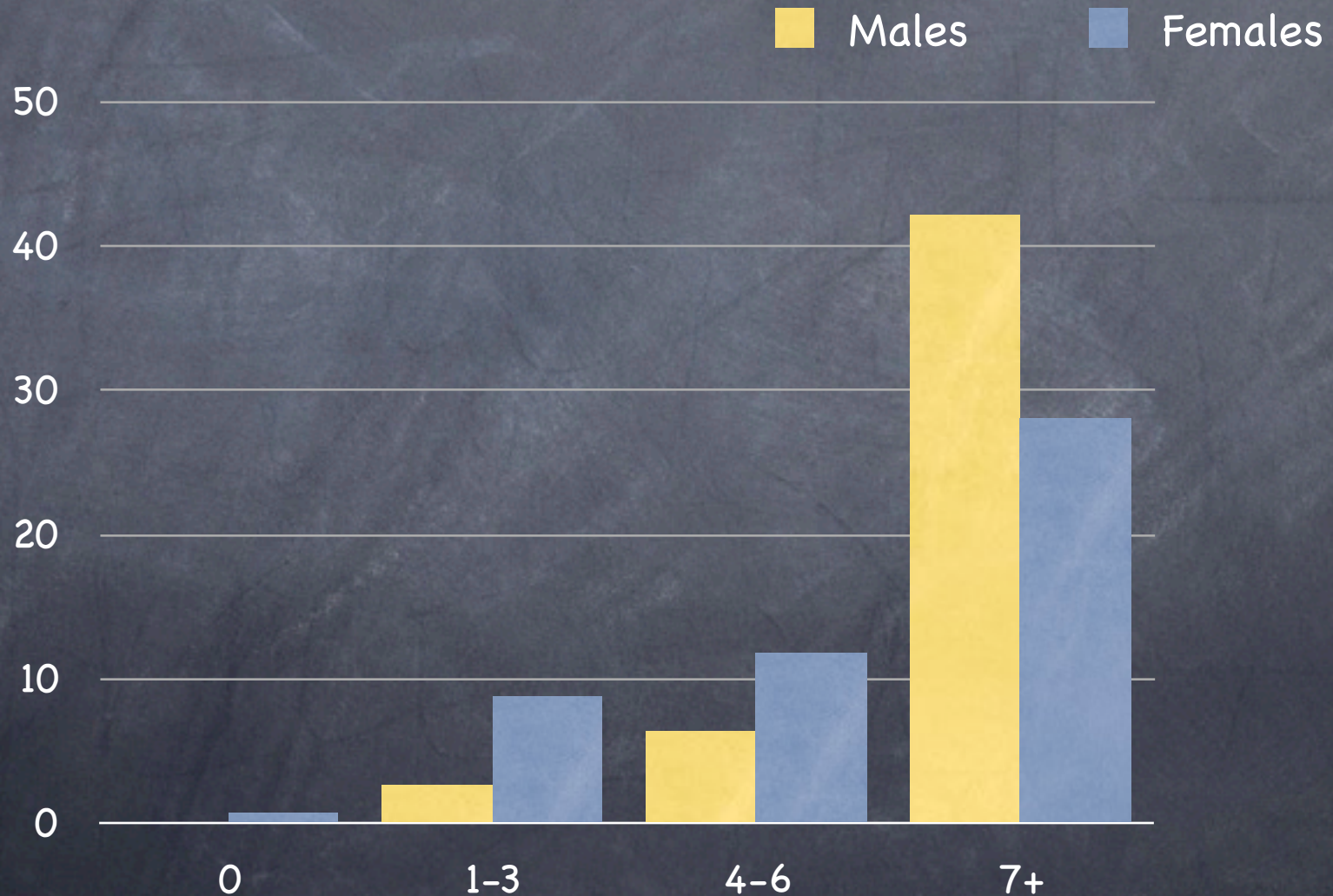


# Average number of hours per week on computers





# Average number of hours per week on the WWW

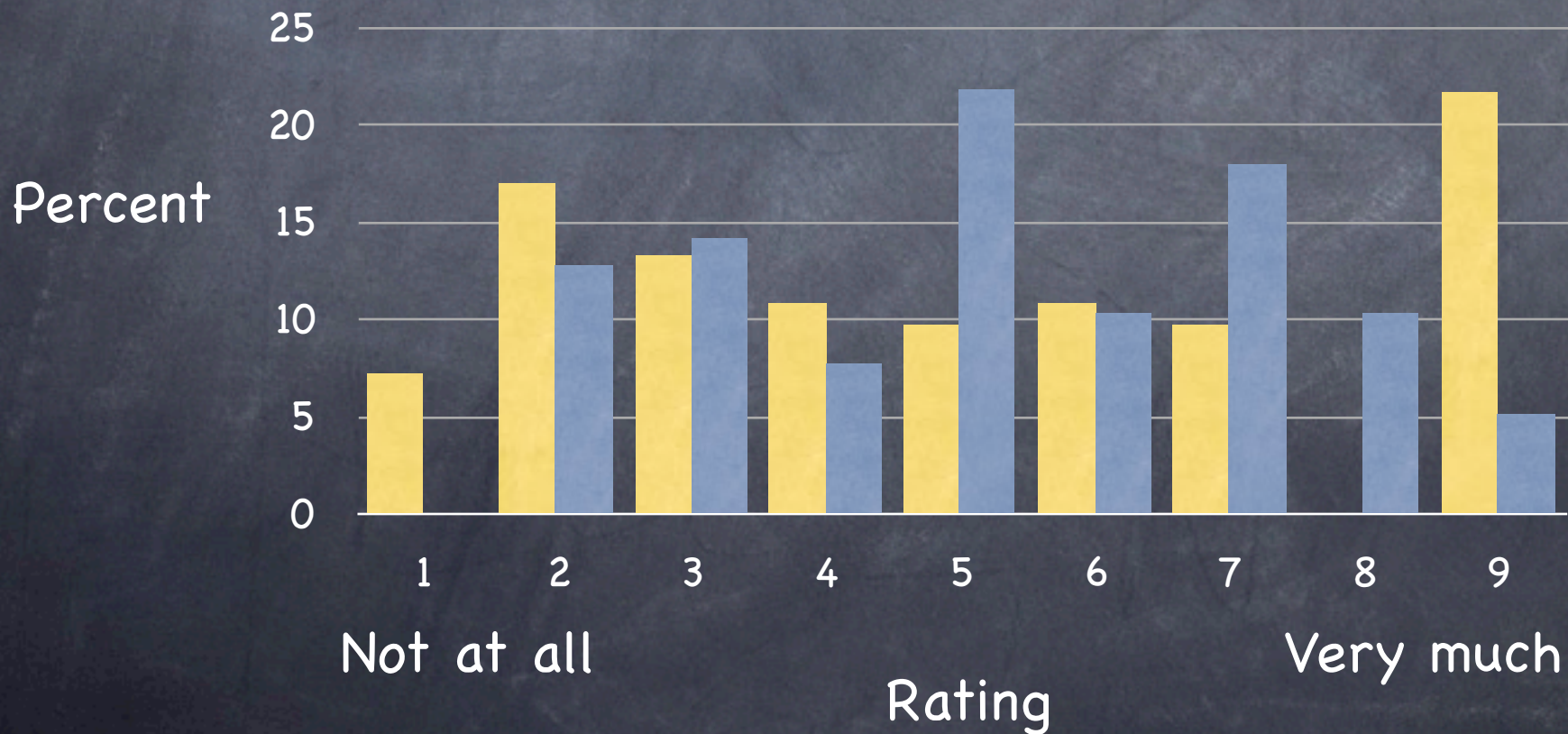




# Overall how frustrated are you with computers?

■ Males ■ Females

Chi-Square (8) = 29.0,  $p < .001$

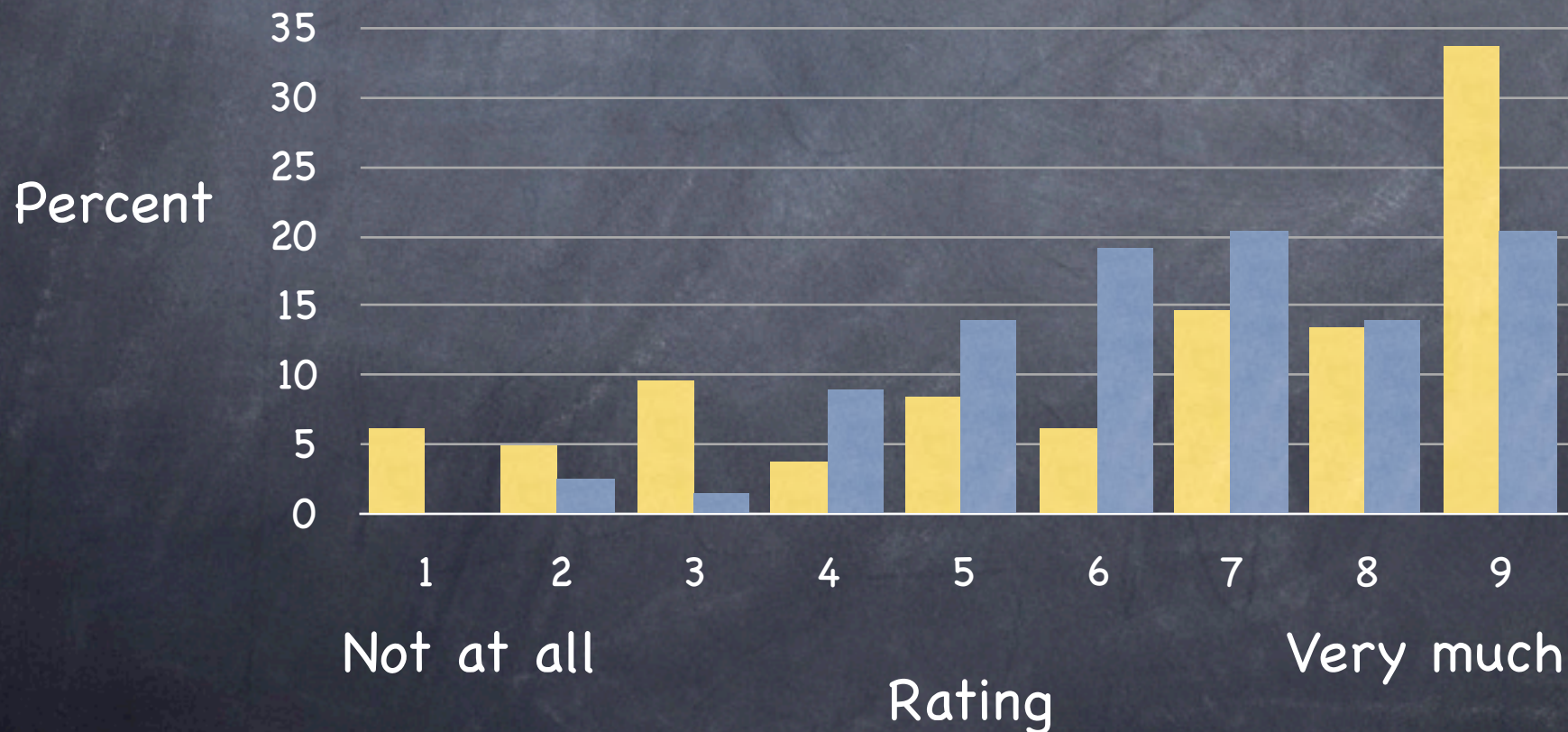




# To what extent have you been frustrated waiting for a computer to do something?

■ Males      ■ Females

Chi-Square (8) = 22.4,  $p < .01$

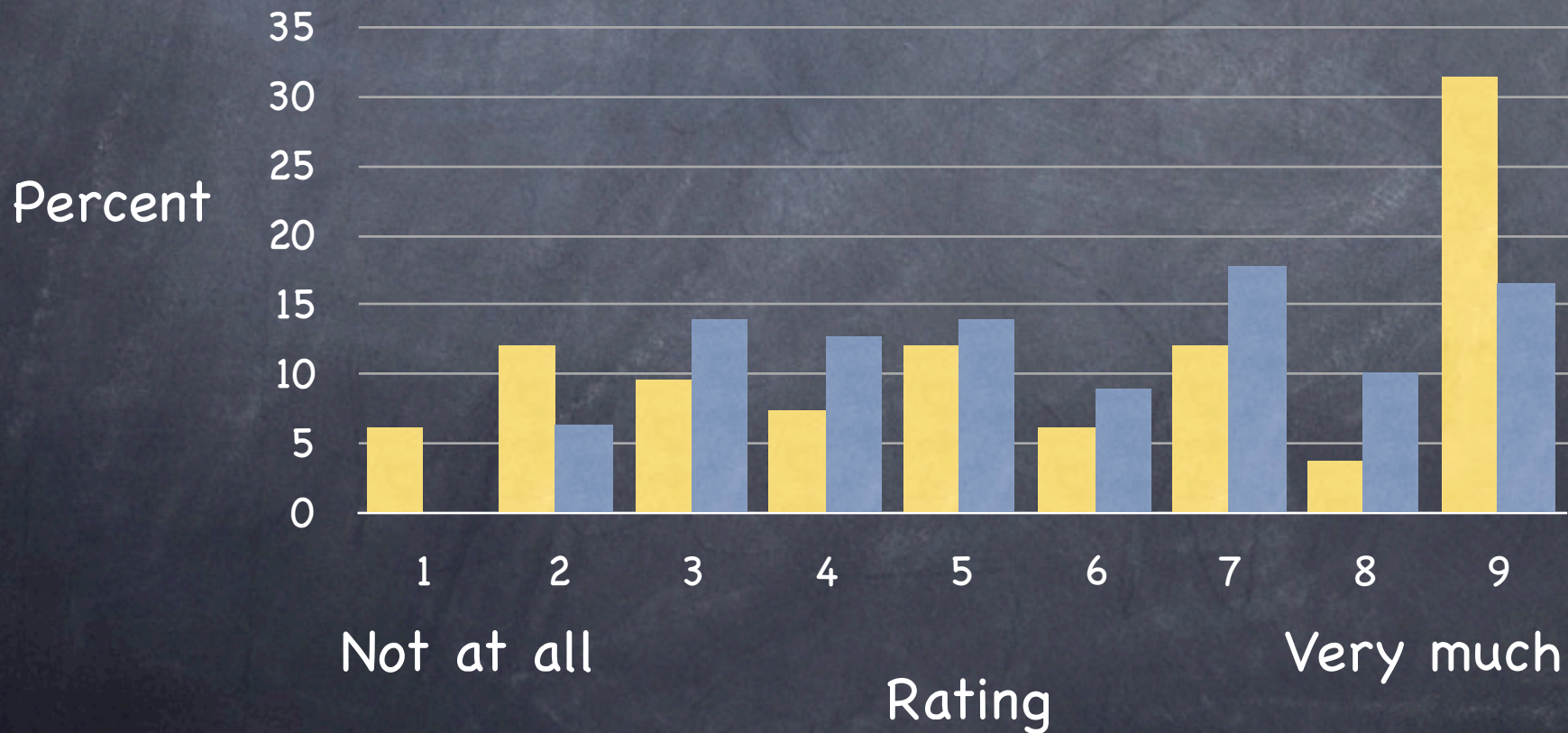




How often have you been frustrated because you had to redo something over and over because of a computer problem?

■ Males ■ Females

Chi-Square (8) = 15.7,  $p < .05$

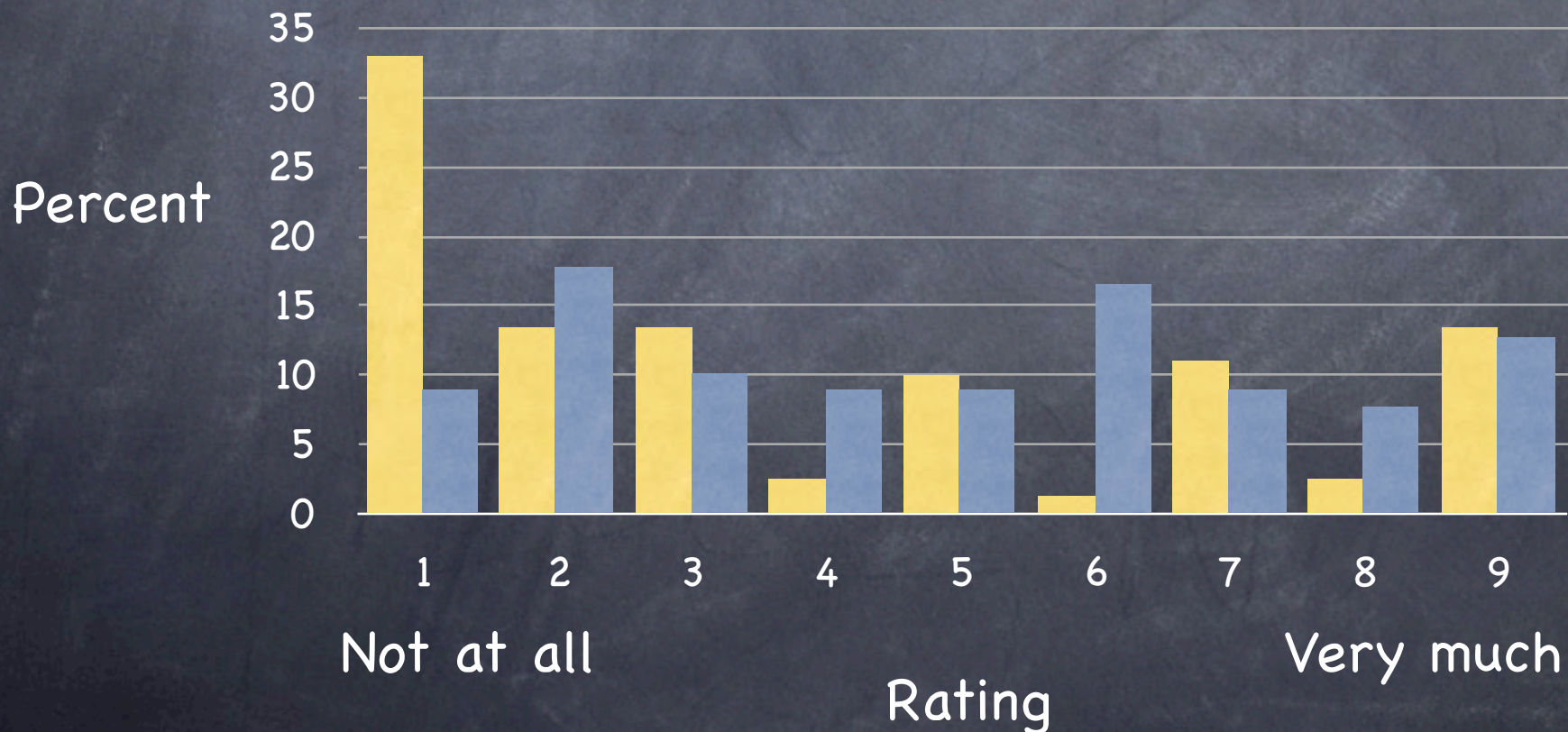




# How frustrated have you been by not understanding how the computer works?

■ Males ■ Females

Chi-Square (8) = 28.0,  $p < .001$

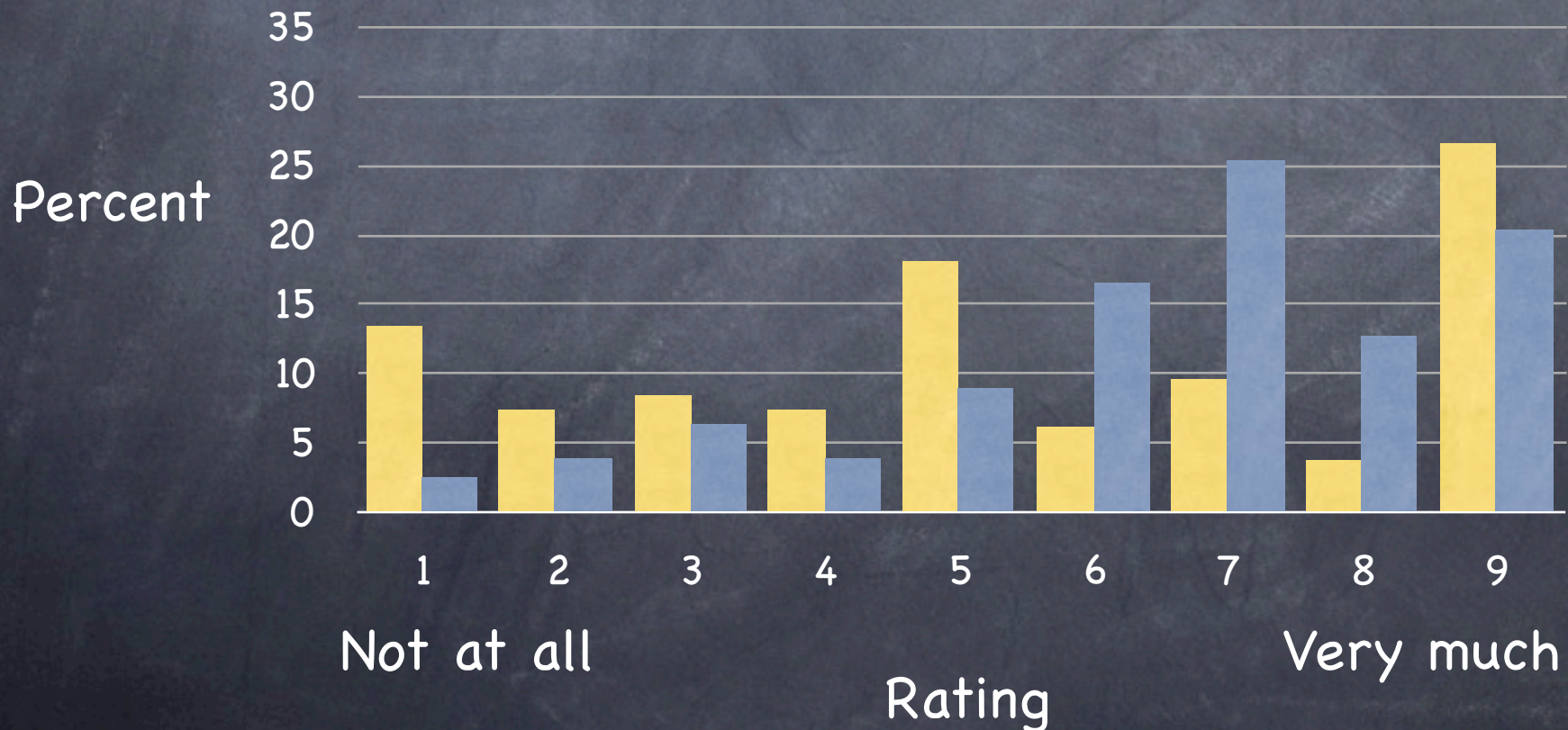




How frustrated have you been when you could not figure out how to get the computer to do something that you wanted?

■ Males ■ Females

Chi-Square (8) = 24.8,  $p < .01$

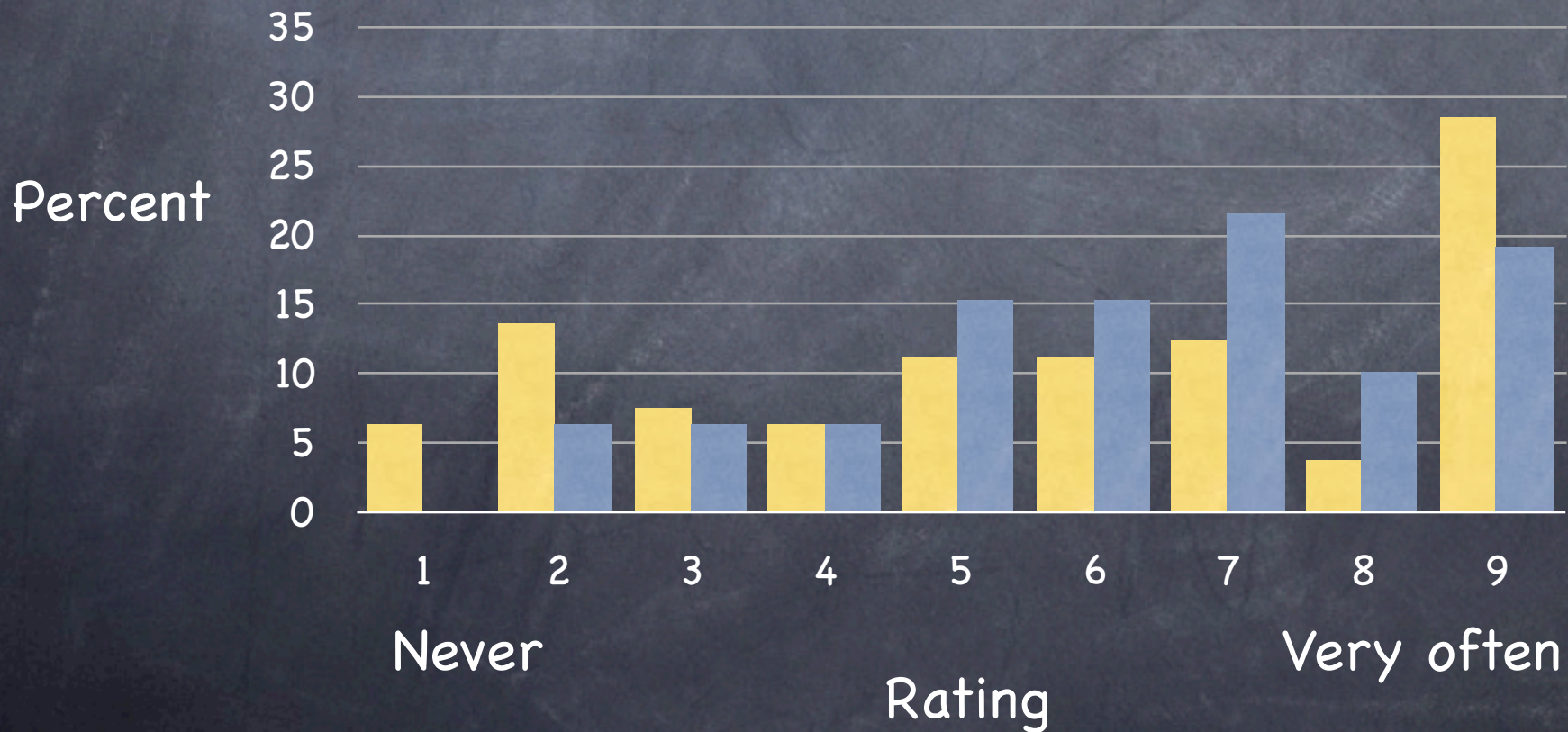




# Have you ever been angry with a computer?

■ Males    ■ Females

Chi-Square (8) = 13.9,  $p > .05$

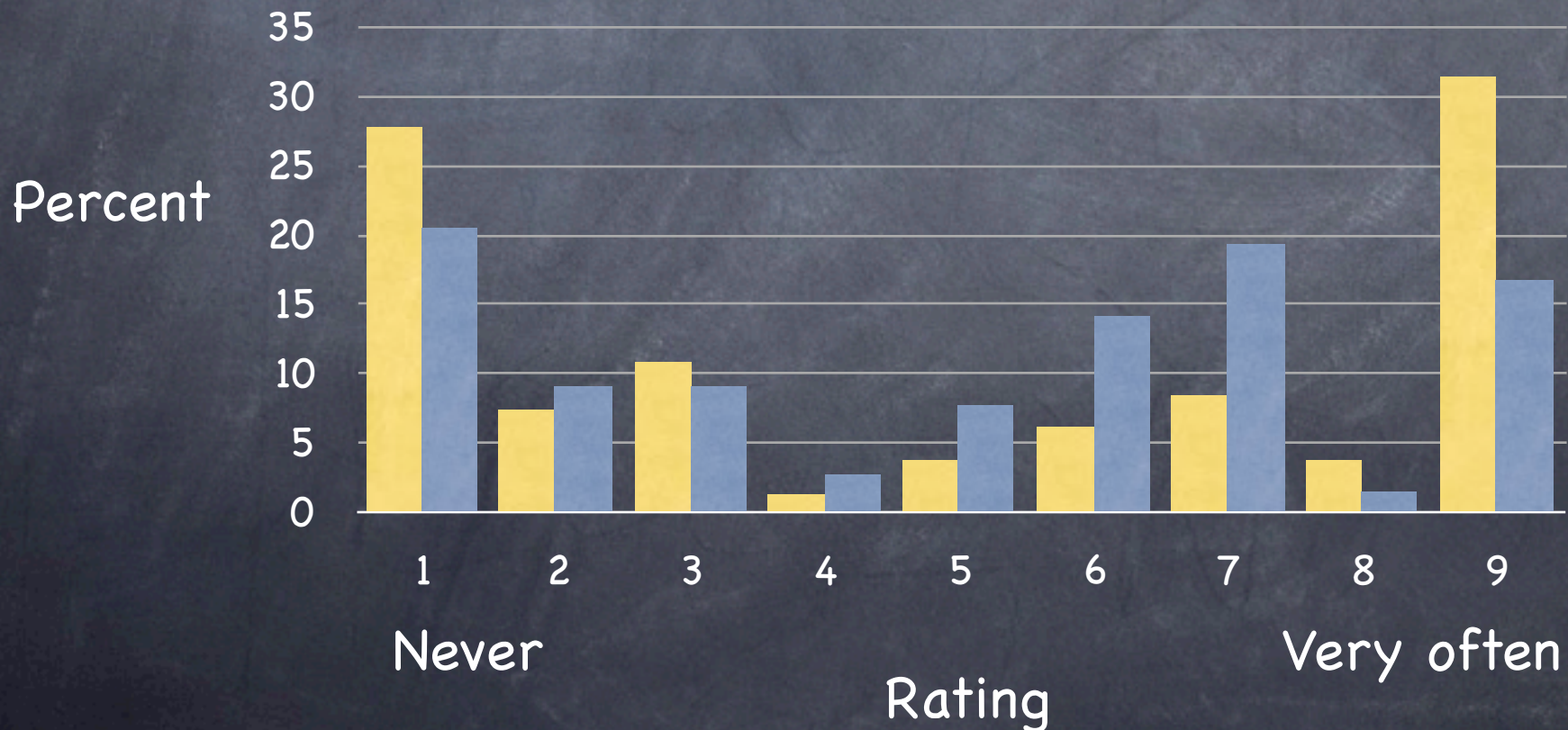




# Have you ever felt like smashing a computer screen with a heavy object?

■ Males ■ Females

Chi-Square (8) = 13.3,  $p > .05$

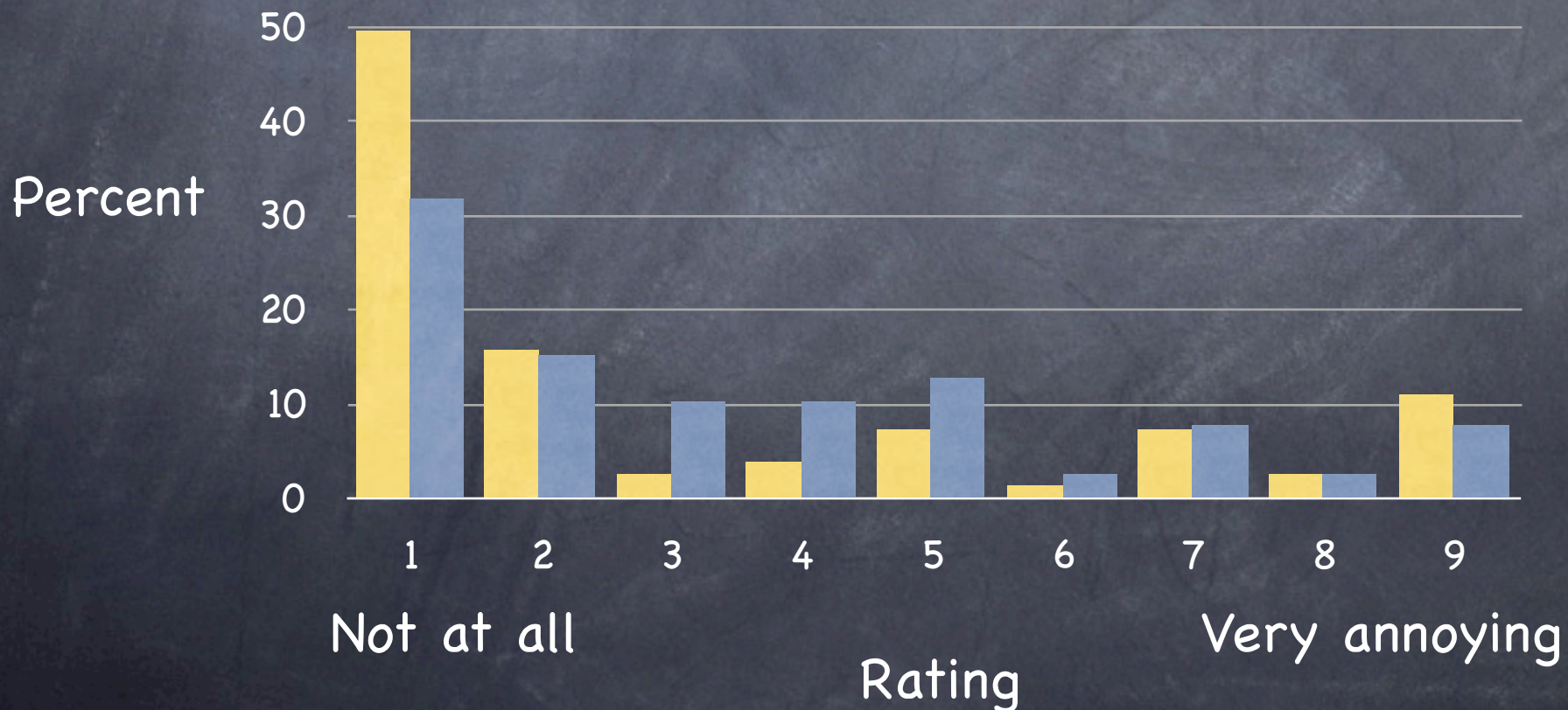




# How annoying is it to you to use a mouse to move a cursor around the screen?

■ Males ■ Females

Chi-Square (8) = 11.3,  $p > .05$

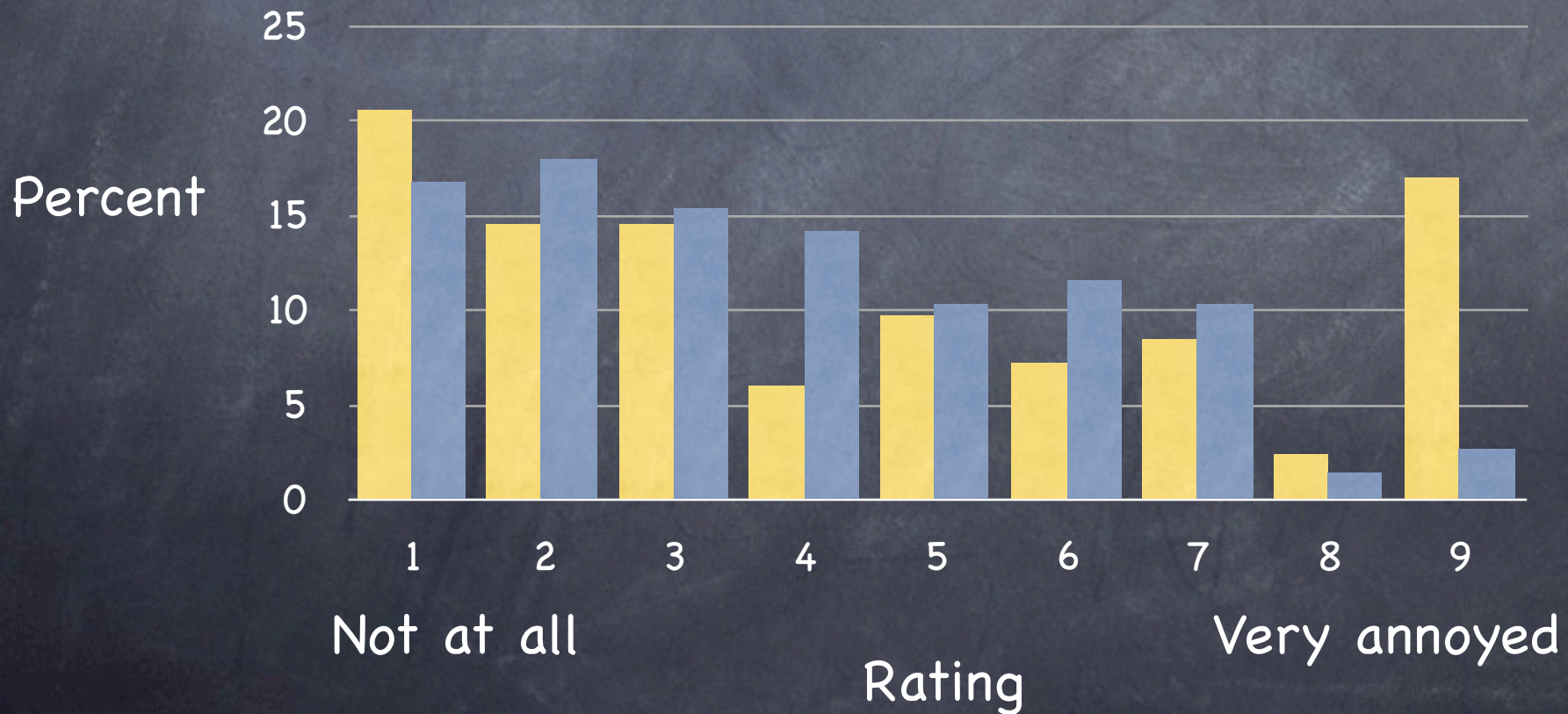




# How annoyed have you been because of typing errors on a computer?

■ Males    ■ Females

Chi-Square (8) = 12.8,  $p > .05$

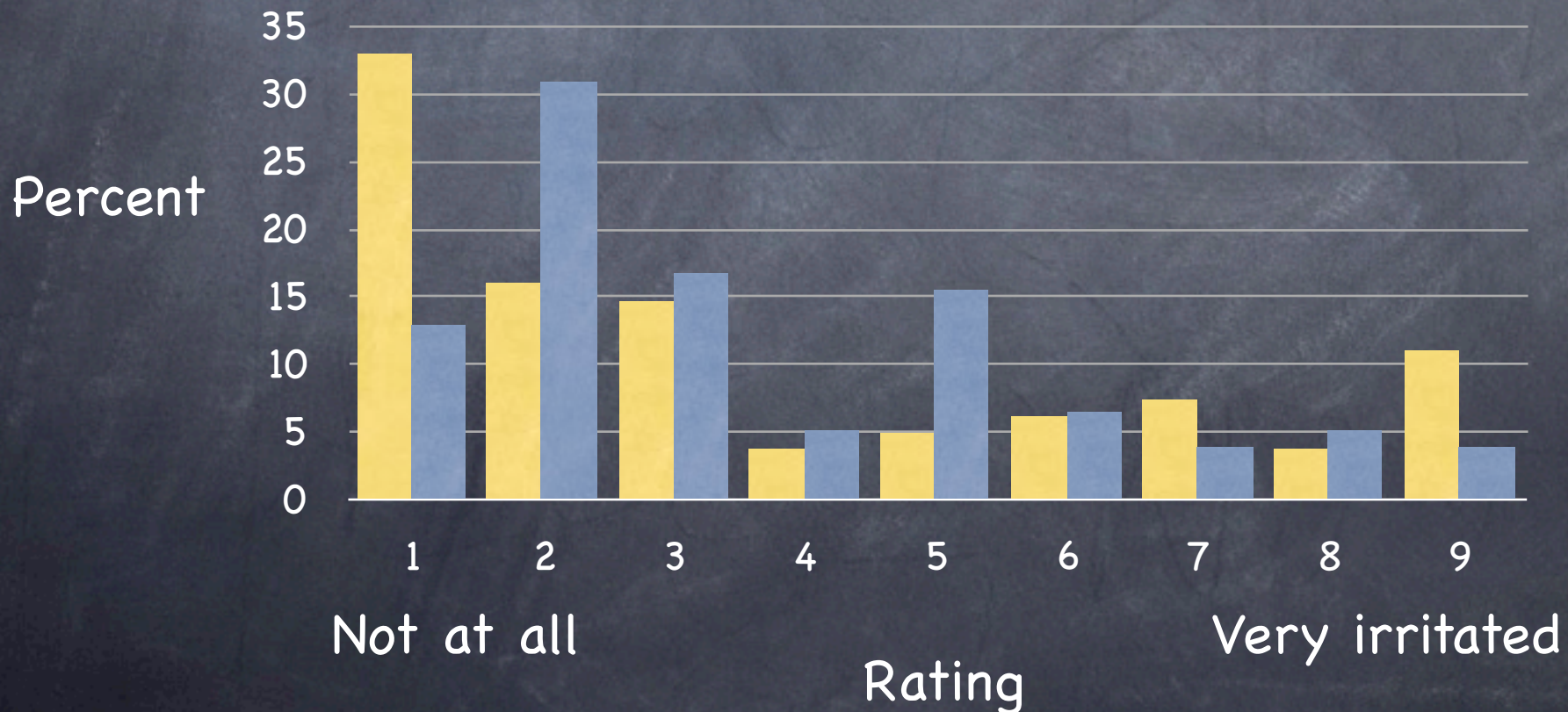




# How irritated have you been by how hard it is to read the computer screen?

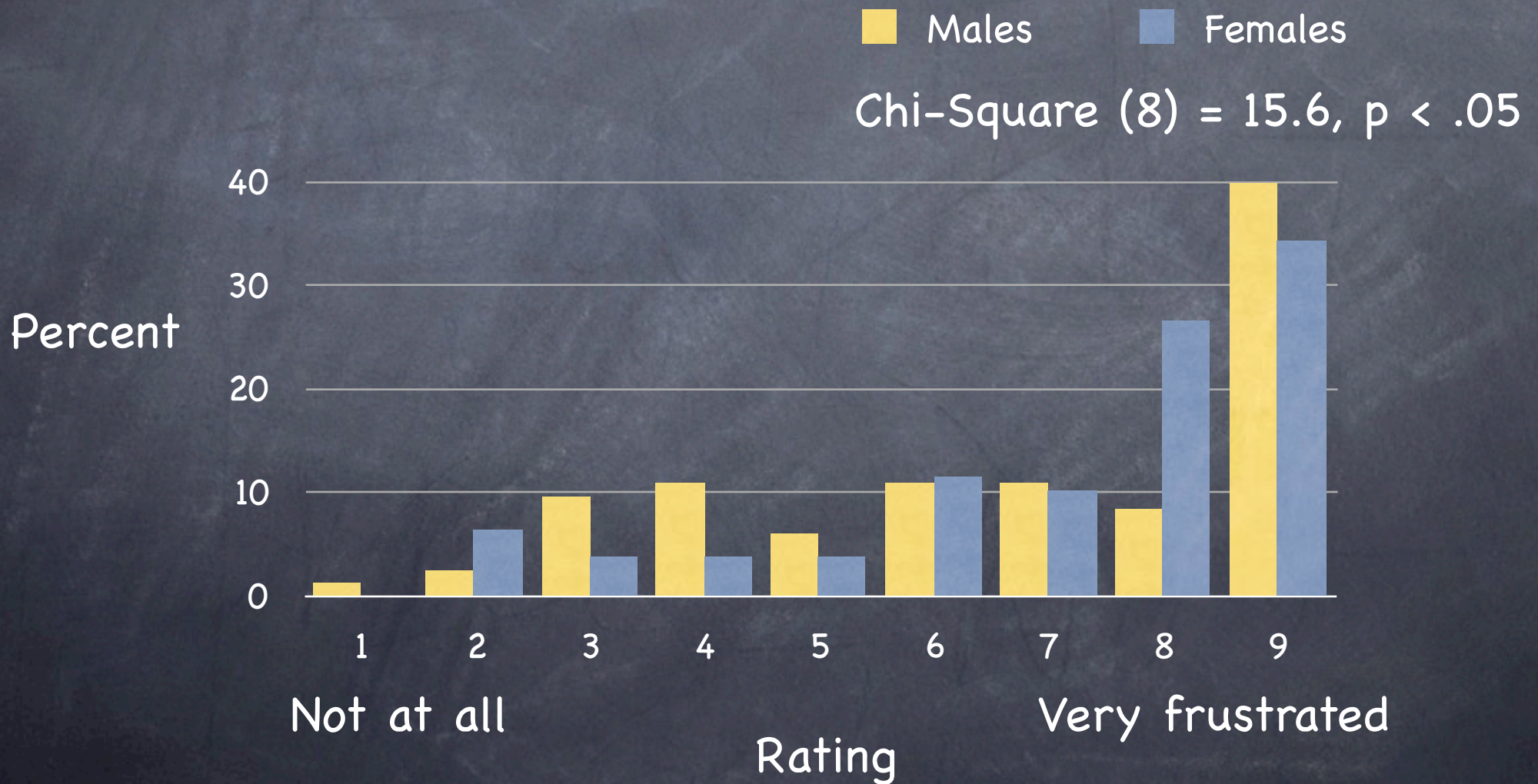
■ Males      ■ Females

Chi-Square (8) = 19.3,  $p < .05$





# How frustrated do you get when the computer crashes and has to be restarted?

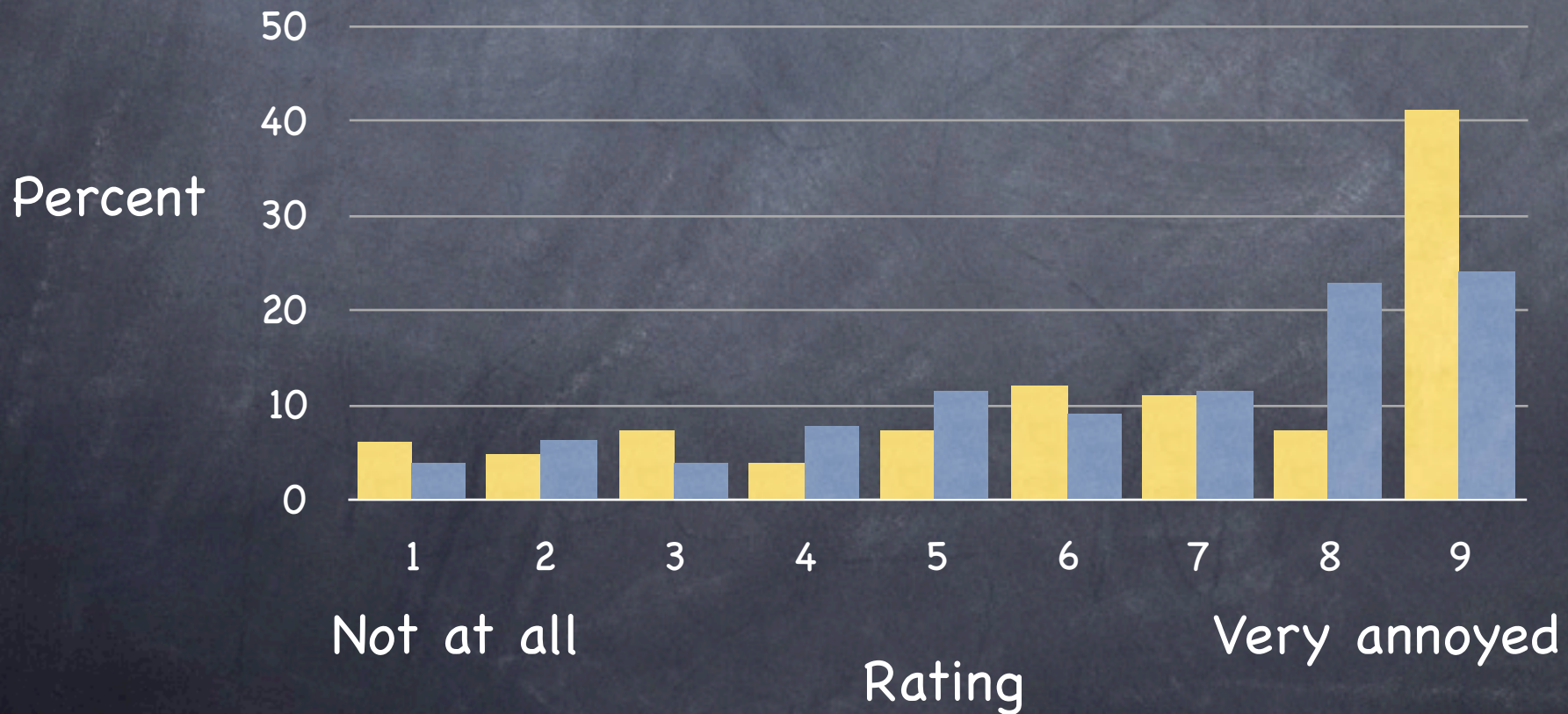




# How annoyed have you been by computer help systems not giving you answers?

■ Males    ■ Females

Chi-Square (8) = 13.9,  $p > .05$

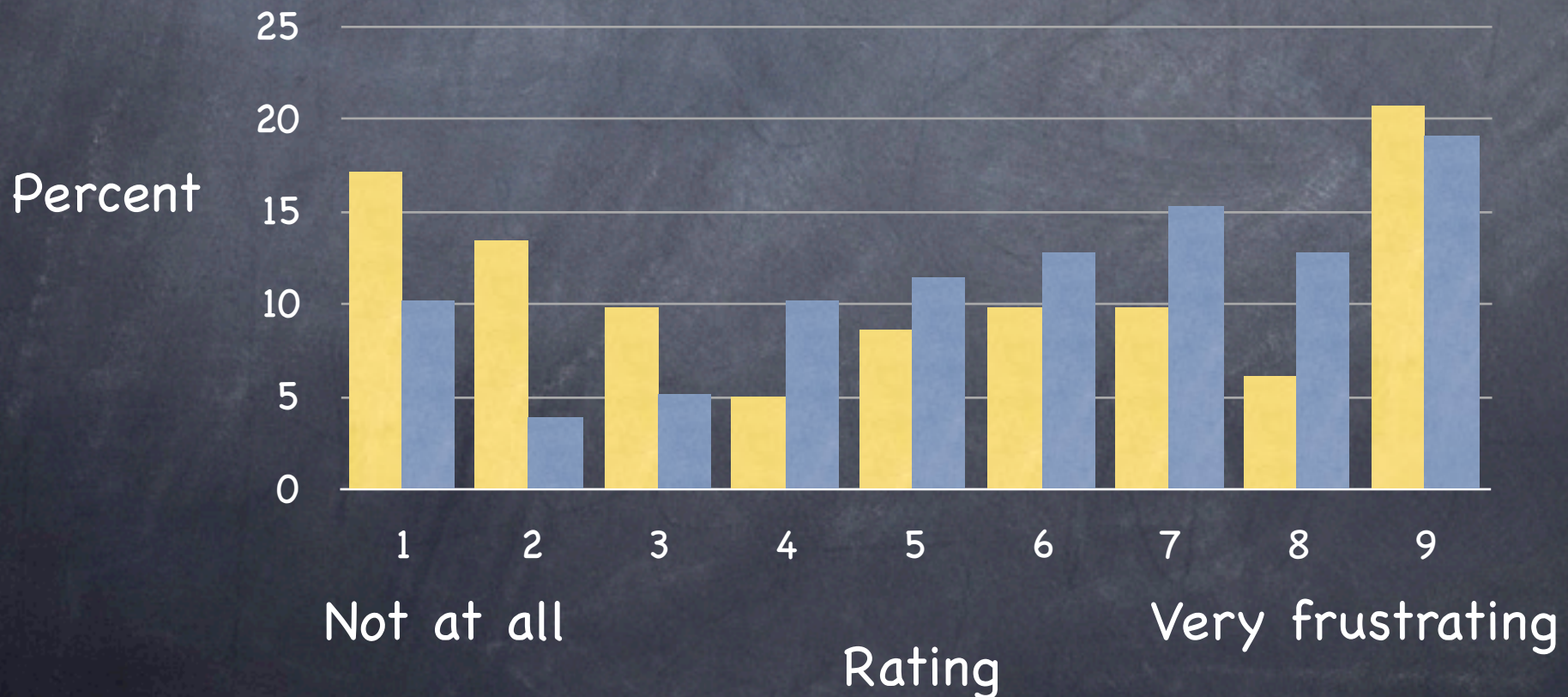




# How frustrating are computer manuals and documentation to you?

■ Males ■ Females

Chi-Square (8) = 11.9,  $p > .05$

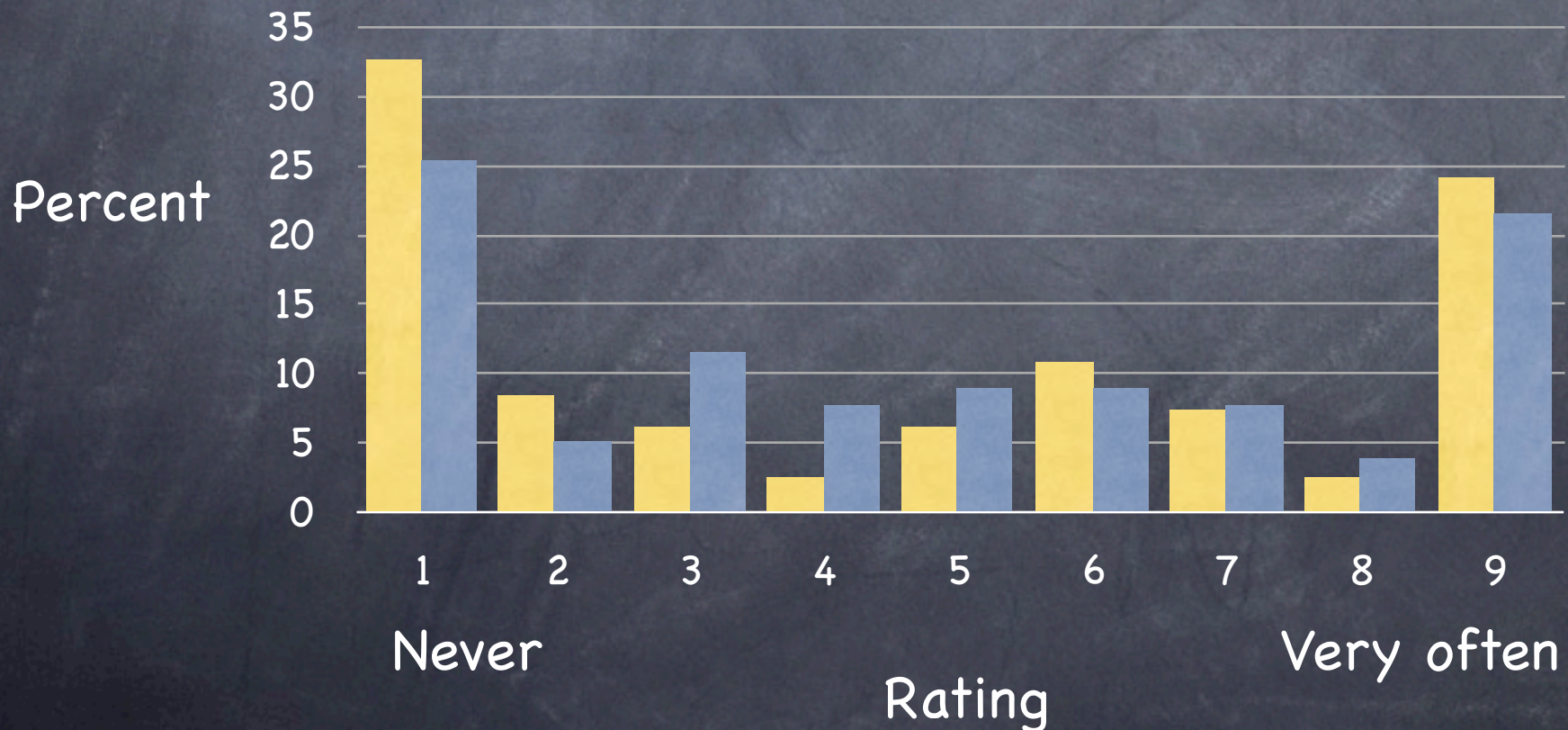




# Have you ever wanted to throw your monitor out of a window?

■ Males      ■ Females

Chi-Square (8) = 5.9,  $p > .05$

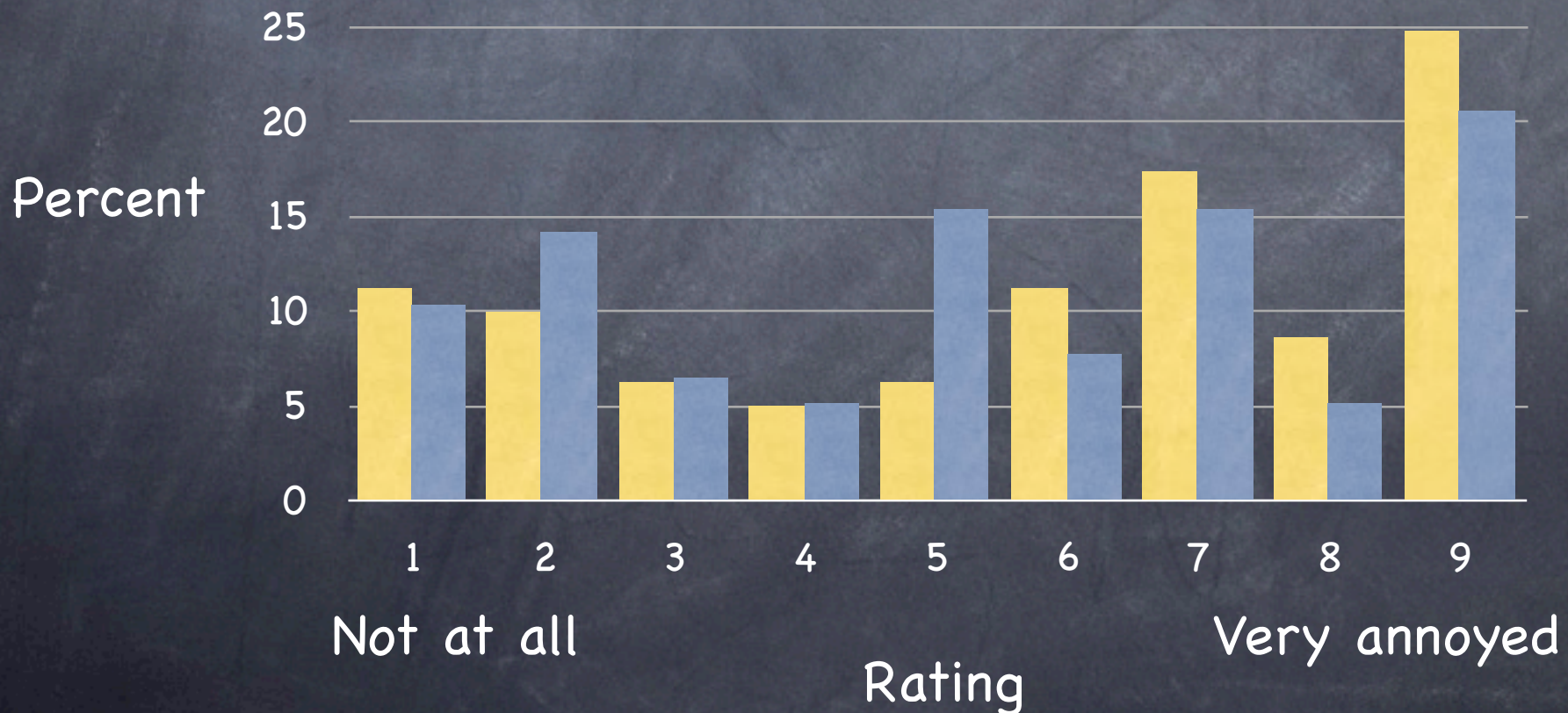




# How annoyed have you been with computer help desks and hot lines?

■ Males ■ Females

Chi-Square (8) = 5.4,  $p > .05$

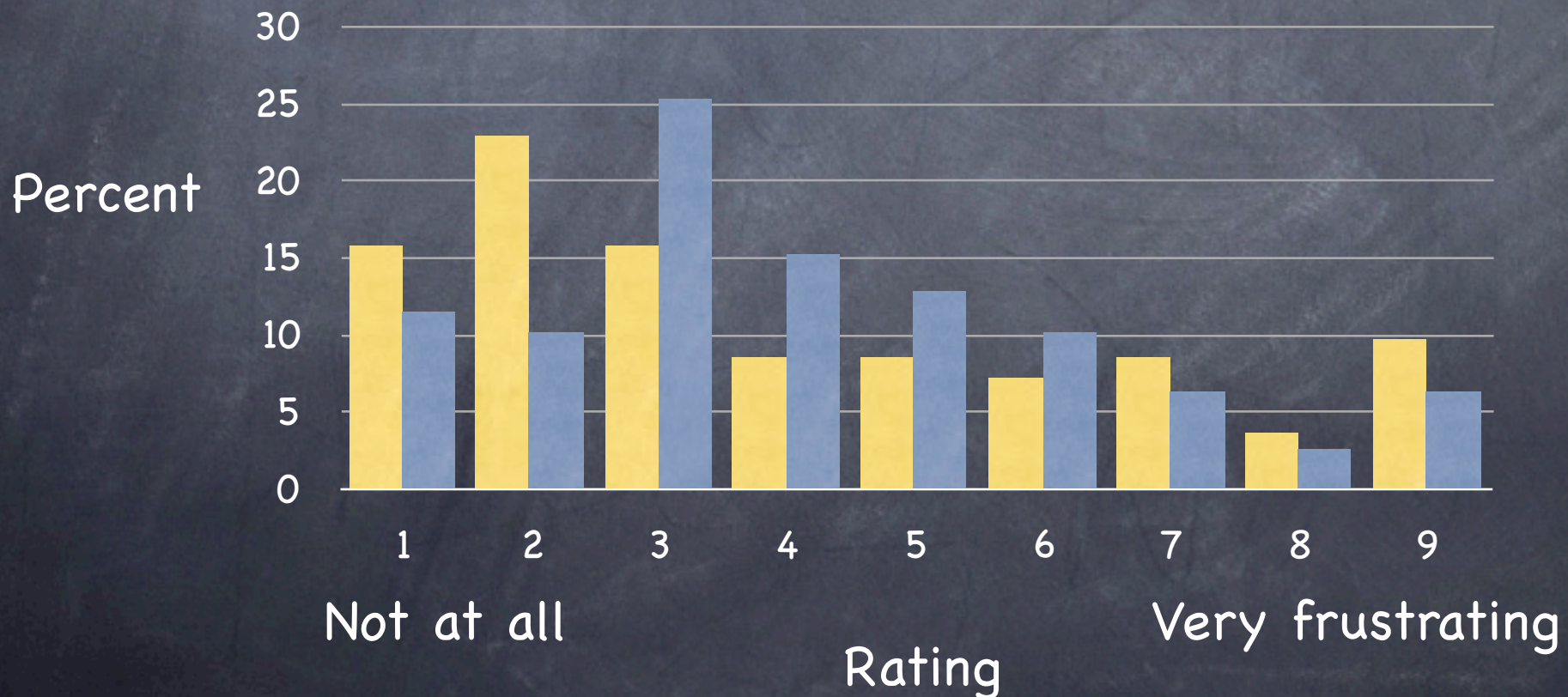




# How frustrating is it trying to find information on the World Wide Web?

■ Males ■ Females

Chi-Square (8) = 10.0,  $p > .05$

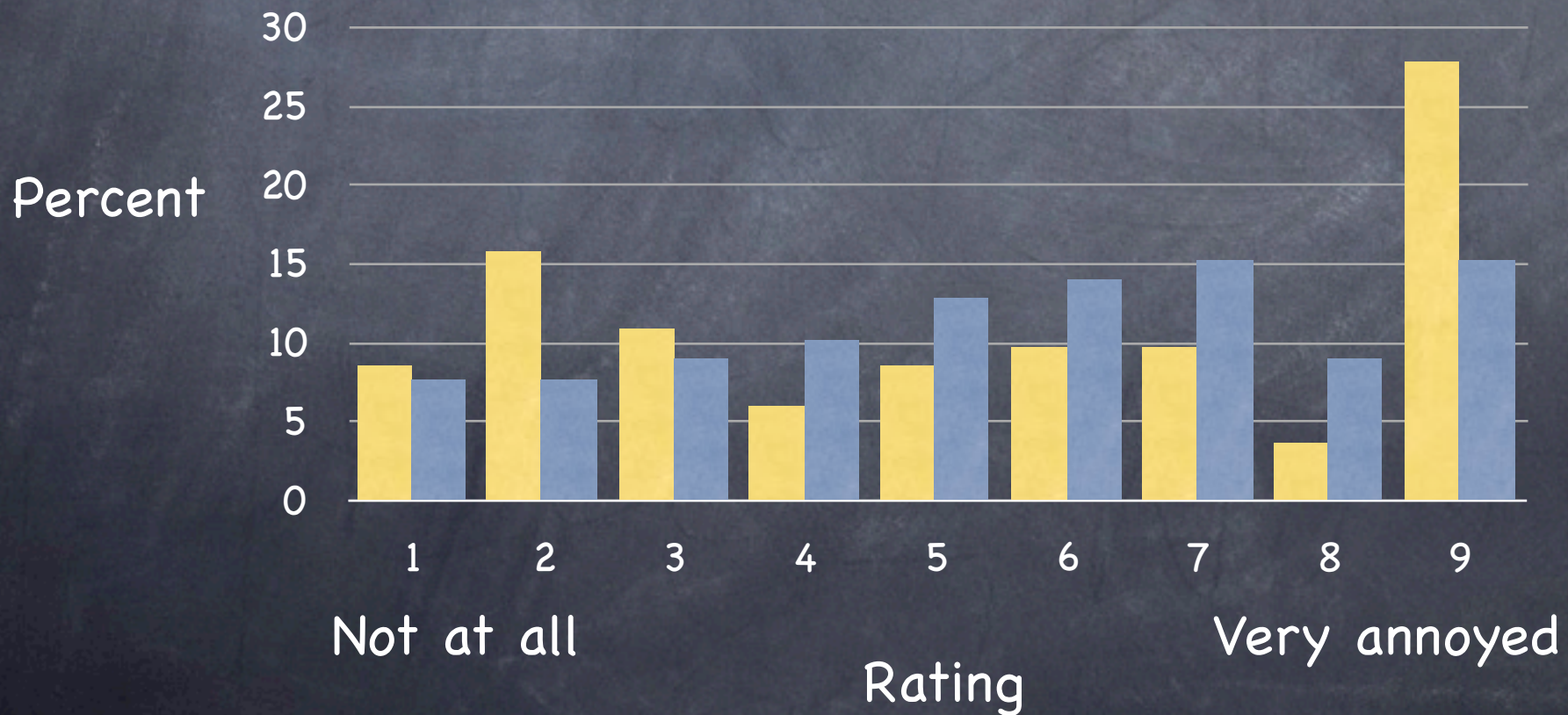




# How annoyed are you by too much email?

■ Males ■ Females

Chi-Square (8) = 10.4,  $p > .05$

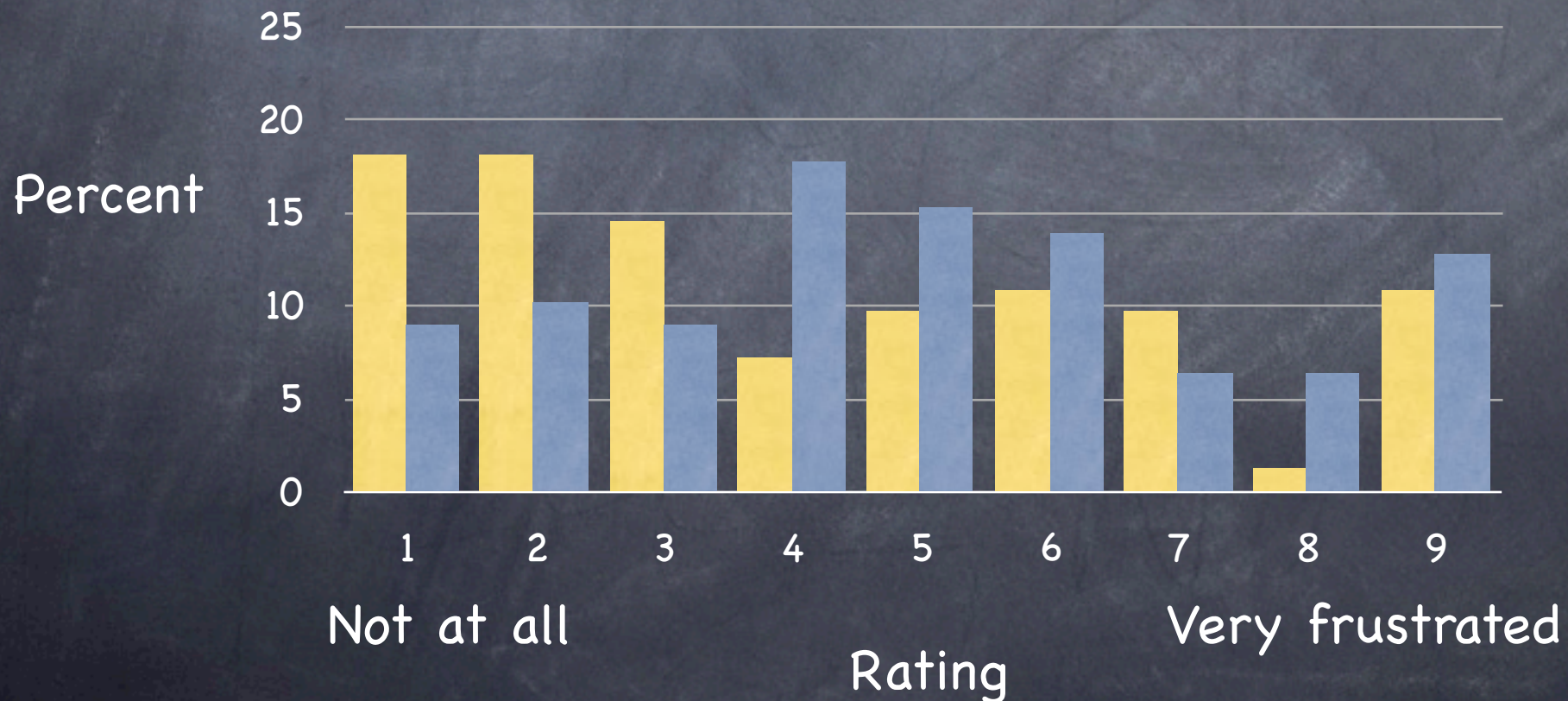




# How frustrated have you gotten when trying to set up a new computer system?

■ Males ■ Females

Chi-Square (8) = 13.9,  $p > .05$

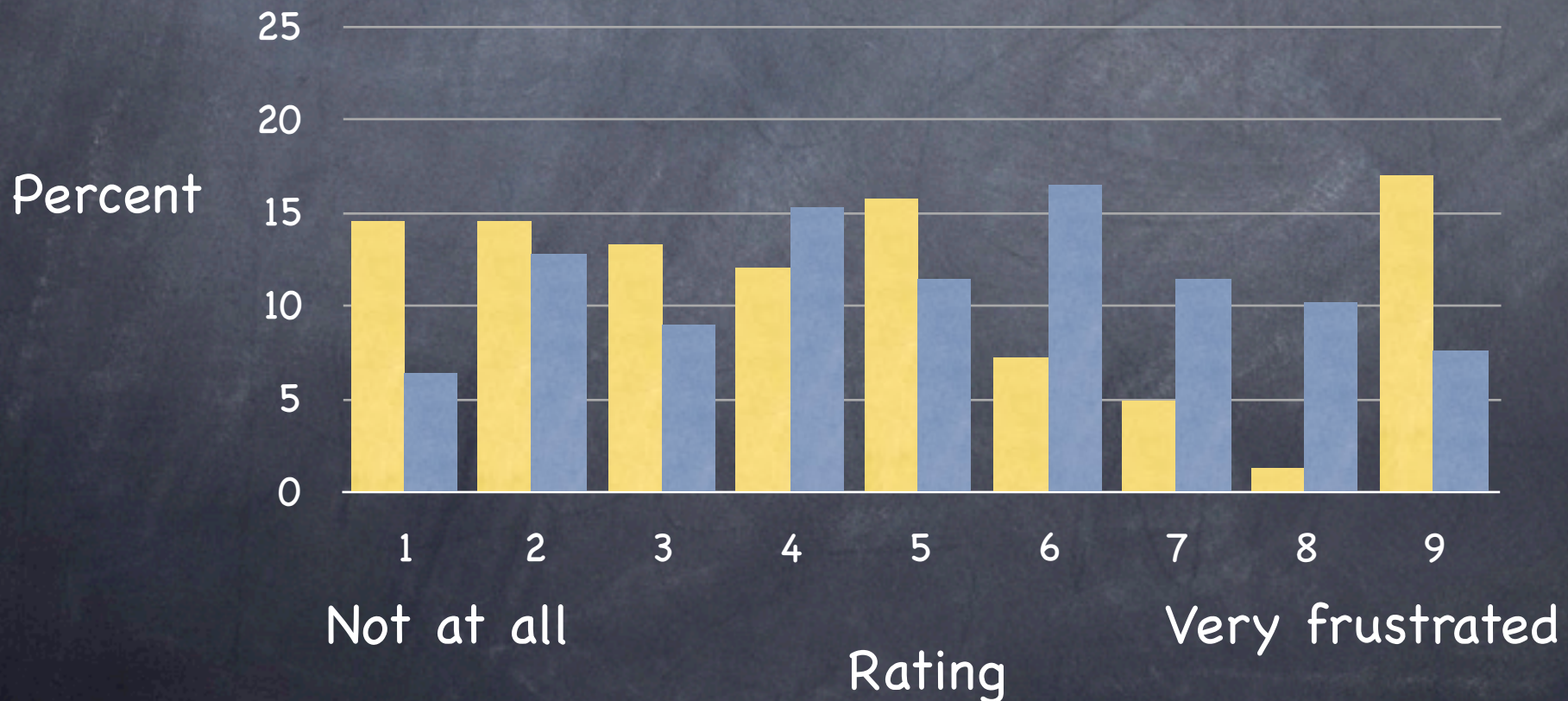




# How frustrated have you gotten when trying to install new software?

■ Males ■ Females

Chi-Square (8) = 17.9,  $p < .05$

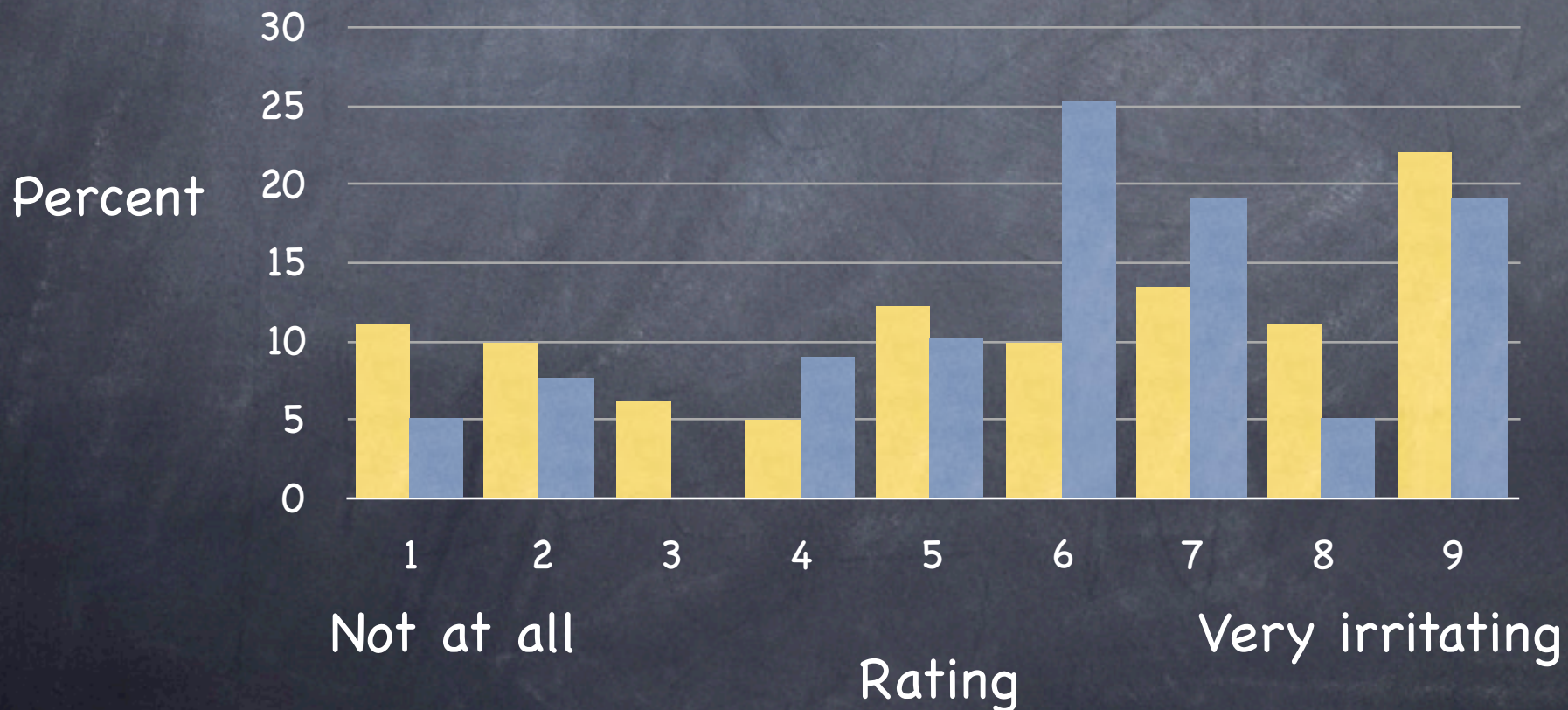




# How irritating has it been for programs to become obsolete and having to upgrade to new versions?

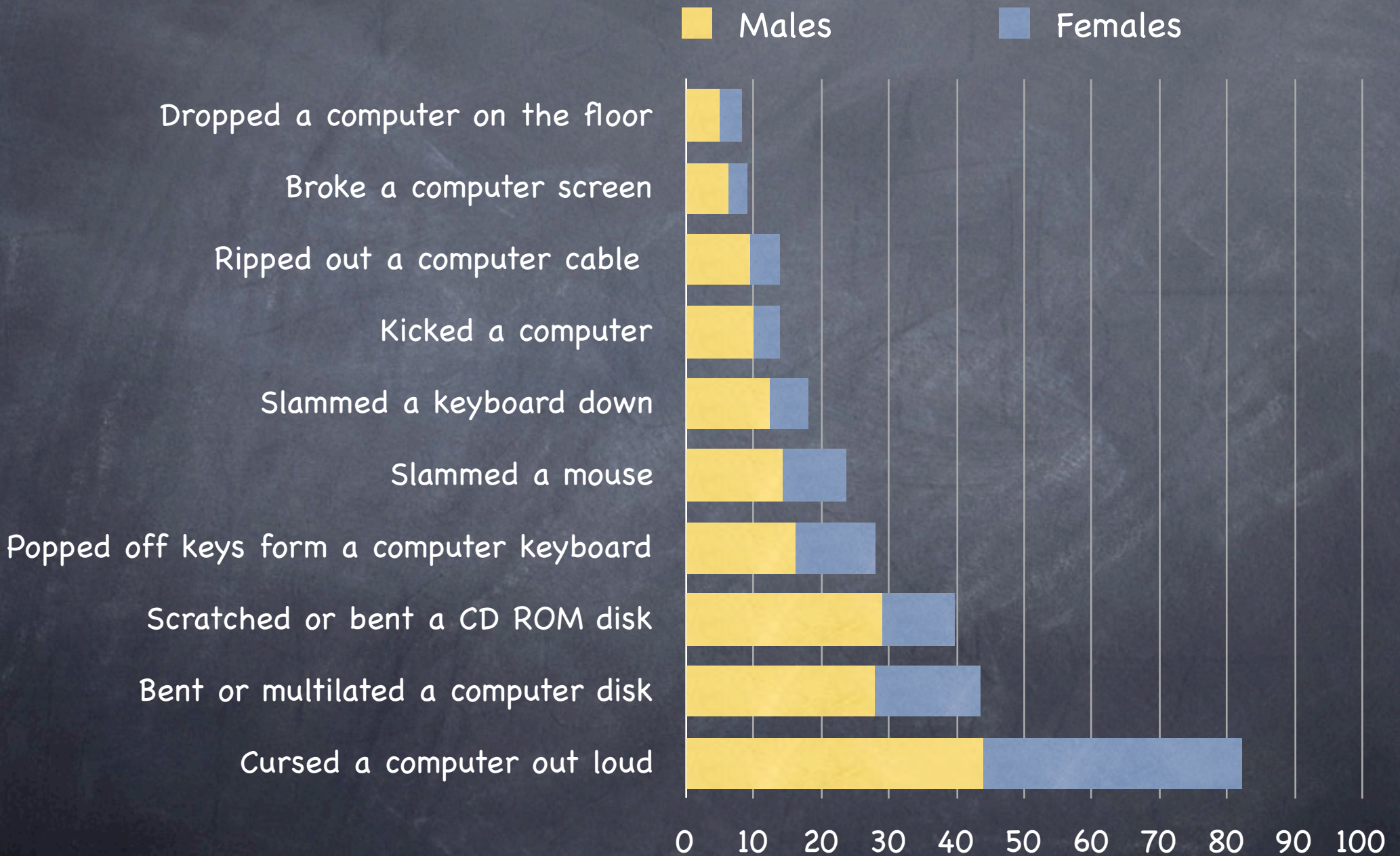
■ Males ■ Females

Chi-Square (8) = 16.2,  $p < .05$





# Incidence of Rage Behaviors by Gender





# The Down Side of Computer Rage

- Destruction of personal, business, or government property (estimates are in the millions of dollars annually)
- Potential injury to self or others
- Loss of personal time or time on the job



# The Up Side of Computer Rage

- Release of pent up anger
- Directed at physical objects rather than other people
- Can be personally rewarding
- Helps to reduce inventory of older equipment and increase purchase of new equipment



# Good Practices of Computer Rage

- Controlled Rage: Find the appropriate time, place, and method.
- Safety First: Use safety goggles and protect others.
- Select Targets Wisely: Preferably Vent on Obsolete Equipment.
- Consider Vicarious Computer Rage: Buy our Computer Rage I and II DVDs.



# The End



NOW WHO'S MADE THE "FATAL ERROR" ?