



Fig. E-1

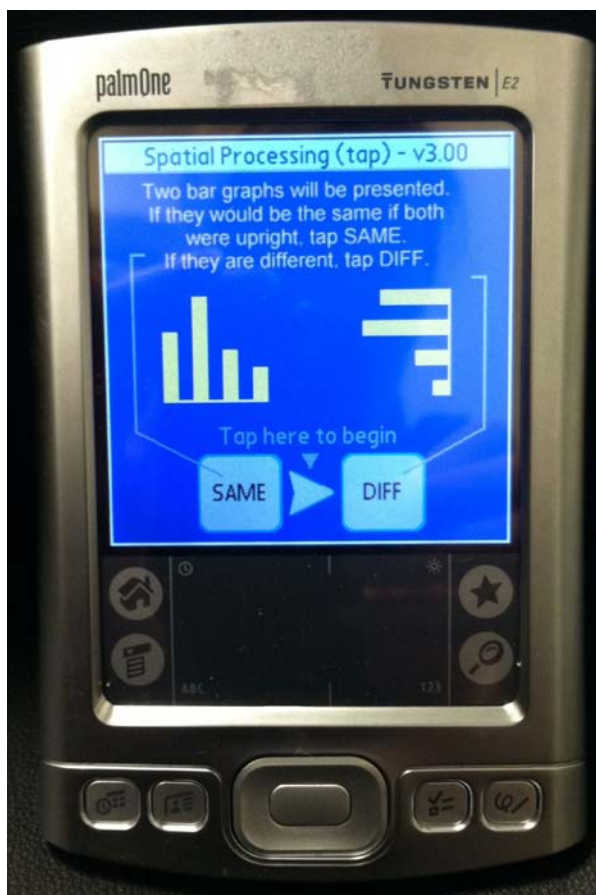


Fig. E-2

Fig. E-1

Photographs of handheld computers demonstrating the Matching to Sample test. Sample image to be memorized (left) and options for matching to the sample (right) are shown on the monitor of the handheld computer.

Fig. E-2

Photograph of a handheld computer demonstrating the Spatial Processing test, in which two four-bar histograms are shown on the monitor of the handheld computer.

TABLE E-1 Demographic Characteristics of Study Participants

| Group | Age* (yr) | Male Participants (%) |
|----------------------------|---------------|-----------------------|
| Residents (n = 16) | 31 (29 to 37) | 12 (75) |
| Fellows (n = 10) | 34 (31 to 37) | 10 (100) |
| Attending surgeons (n = 6) | 45 (38 to 56) | 6 (100) |
| All (n = 32) | 35 (31 to 56) | 28 (88) |

*The values are given as the mean, with the range in parentheses.

TABLE E-2 Tests Administered

| Test | First Test Period* (January to February 2008) | Second Test Period† (September to October 2008) |
|-------------------------|--|--|
| Matching to Sample | No | Yes |
| Running Memory | Yes | Yes |
| Spatial Processing | Yes | Yes |
| Simple Reaction Time | Yes | Yes |
| Mathematical Processing | Yes | No |
| Pursuit Tracking | Yes | No |

*The first test period was thirty days. †The second test period was twenty-six days.