

CHAPTER 6
DATA COLLECTION

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6.1 DATA COLLECTION

All the data was collected with the Field REG devices connected to a laptop with the Sample size set to 200 Bits/Sec. Comments were entered to mark segments in the event and to note some details about the event. Data was examined according to overall experiments and by time-stamped epochs following human events in proximity to the test environment.

6.2 DATA EXTRACTION

From the Psyleron REG-1 software, the data was imported to the excels for further analysis.

6.3 DATA ANALYSIS

The details of considering the theoretical (chance) for the number of '1s' per event, the mean for each event is 100 with a standard deviation of $\sqrt{50}$. REG data from each event within each epoch were analyzed independent of either previous or subsequent values; relevant statistics and figures were produced accordingly. Individual event scores were standardized according to 0.5 chance expectations $Z = \frac{x - 100}{\sqrt{50}}$ where x is the trial value of each event. Combined overall Z-scores (Z_c) for each overall experiment and each individual epoch were computed using Stouffer's method $Z_c = \frac{\sum Z}{\sqrt{N}}$ where Z = individual event Z-scores and N = the number of events in the epoch. Effect sizes were calculated as $ES = \frac{Z_c}{\sqrt{N}}$, which is equivalent to the mean event z-score.

Since this being an exploratory study two-tailed probabilities of deviations have been reported of REG output. A probability of less than 0.05 was considered significant and $P < 0.1 > 0.05$ is considered as REG trend. The time-stamped epochs, their respective trial counts and statistics are presented in the tables where N = number of REG events, Z_c = combined z-score, E_s = effect size (Z_c/\sqrt{N} ; equal to mean REG z), p = probability (2T) of Z_c .

**significant at $p < 0.05$,* trend at $<0.1 > 0.05$ (2T).