

The data (***ReactionEvent.sav***) sought to examine whether individuals would be able to predict their reactions to rediscovering ordinary vs. extraordinary events. The authors predicted that people may underestimate the levels of curiosity and interest they will experience when looking back on the ordinary day-to-day experiences of their lives, whereas they will be accurate when predicting their future reactions to extraordinary events.

To test this hypothesis, the authors recruited individuals who were currently involved in romantic relationships, and asked half of the participants to write about an extraordinary day with their romantic partner (Valentine's Day), and the other half to write about an ordinary day with their romantic partner (what happened two days ago). The authors then asked participants rate the degree of extraordinariness for their diary entry, to check to see if this manipulation was effective.

The authors also asked participants to predict how they would view their written description in the future. In particular, participants predicted their levels of curiosity and interest (a composite of how enjoyable, interesting, meaningful, and surprising the thought they would find the description), should they rediscover the description in the future.

Three months later, the authors contacted all of the participants, and had them read their description of the extraordinary or ordinary day, and then rate how extraordinary the event was in retrospect, as well as their levels of curiosity and interest upon rediscovering the description (once again, the interest rating was a composite of enjoyable, interesting, meaningful, and surprising ratings). They also rated how detailed their memory was for the event in the diary entry, and the percentage of what they wrote about that they remembered.

**General Note: Your answer to each part of question should be supported by proper statistical analysis.**

**Note 1: You might not need all variables in the data file to answer following questions, you should decide which variable is relevant which one not.**

**Note 2: T1 designates that the variable was measured at first session, whereas T2 designates that the variable was measured at second session.**

1. Please identify all potential IVs and DVs. Be sure to include type of variable (levels of measurement) and describe for each IV whether the study is a within or between group design.
2. Apply any appropriate descriptive statistics to help you learn about the subjects in each group of this study, describes the key characteristics of the subjects (gender and age).
3. You first want to show that participants in the Extraordinary condition actually perceived that event to be more extraordinary than did participants in the Ordinary condition. Conduct an analysis to compare the perceived extraordinariness of the events at the first session.

4. The major hypothesis of the study was that people may underestimate the levels of extraordinariness they will experience when looking back on the ordinary day-to-day experiences of their lives, whereas they will be accurate when predicting their future reactions to extraordinary events. What kind of statistical hypothesis testing is appropriate to test researcher's hypothesis? To support researcher's hypothesis what kind of effect should be significant (main effect, interaction etc.)? Please run your analysis and report on results? Do the result support researcher's hypothesis?

**Note: a t-test on second session data is not an appropriate answer. You should use both session's one and two data for both extraordinary and ordinary groups.**

5. Repeat the analysis in question 4 on level of curiosity and also level of interest. Do you reach to the same conclusion as Q4?

6. The researchers also believed that level of extraordinariness at the second session might be different between men and women. Use the second session data for both ordinary and extraordinary group to test researchers' hypothesis?