**Practice: Main Effects & Interactions**

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| **Bar Graph of Data** | **Line Graph of Data** | **Effects Observed** | **Example Experiment** |
|  |  | * Main effect of IV A?   **Yes / No**   * Main effect of IV B?     **Yes / No**   * A X B Interaction?   **Yes / No** | * IV A: **Caffeine**   + A1: *0 mg*   + A2: *200 mg* * (Pseudo-)IV B: **Major**   + B1: *Psychology*   + B2: *English* * DV: **Heart rate** |
|  |  | * Main effect of IV A?   **Yes / No**   * Main effect of IV B?     **Yes / No**   * A X B Interaction?   **Yes / No** | * IV A: **Caffeine**   + A1: *0 mg*   + A2: *200 mg* * (Pseudo-)IV B: **Major**   + B1: *Psychology*   + B2: *English* * DV: **Behavioral research methods knowledge** |
|  |  | * Main effect of IV A?   **Yes / No**   * Main effect of IV B?     **Yes / No**   * A X B Interaction?   **Yes / No** | * IV A: **Caffeine**   + A1: *0 mg*   + A2: *200 mg* * IV B: **Exercise**   + B1: *Run for 15 min*   + B2: *Sit for 15 min* * DV: **Heart rate** |
|  |  | * Main effect of IV A?   **Yes / No**   * Main effect of IV B?     **Yes / No**   * A X B Interaction?   **Yes / No** | * IV A: **Caffeine**   + A1: *0 mg*   + A2: *200 mg* * IV B: **Exercise**   + B1: *Run for 15 min*   + B2: *Sit for 15 min* * DV: **Shoe size** |
|  |  | * Main effect of IV A?   **Yes / No**   * Main effect of IV B?     **Yes / No**   * A X B Interaction?   **Yes / No** | * IV A: **Internet connectivity**   + A1: *Fast wifi*   + A2: *Slow wifi* * IV B: **Dictionary type**   + B1: *Online dictionary*   + B2: *Physical dictionary* * DV: **Time taken to find definition of word** |
|  |  | * Main effect of IV A?   **Yes / No**   * Main effect of IV B?     **Yes / No**   * A X B Interaction?   **Yes / No** | * (Pseudo-)IV A: **Age**   + A1: 60-year-olds   + A2: 20-year-olds * IV B: **Dictionary type**   + B1: *Online dictionary*   + B2: *Physical dictionary* * DV: **Time taken to find definition of word** |
|  |  | * Main effect of IV A?   **Yes / No**   * Main effect of IV B?     **Yes / No**   * A X B Interaction?   **Yes / No** | * IV A: **Party band quality**   + A1: *Bad band*   + A2: *Great band* * (Pseudo-)IV B: **Dancing preference**   + B1: *Does not like dancing*   + B2: *Likes dancing* * DV: **Amount of time spent dancing at party** |
|  |  | * Main effect of IV A?   **Yes / No**   * Main effect of IV B?     **Yes / No**   * A X B Interaction?   **Yes / No** | * IV A: **Party band style**   + A1: *Jazz*   + A2: *Top 40* * (Pseudo-)IV B: **Dancing preference**   + B1: *Likes dancing to Top 40*   + B2: *Likes dancing to jazz* * DV: **Amount of time spent dancing at party** |