Evaluation Plan- Storm Watchers

Activity
1. We [Shivani Kohli, Jack Doyle, and Riddhiman Adibi] will provide the subject with the Storm Watchers tornado web app. The Storm watcher tornado web app displays the number of tornadoes, its magnitude and location in all 50 states in the US from 1950 to 2015. The subject will be given certain tasks based on which the subject can adjust parameters available on the web app.

    The subject will answer the next four bolded questions. The responses will be recorded and compared to our [Shivani K., Jack D., and Riddhiman A.] gold-standard answers for minimum and maximum tornados present on the map using just the fill-in option on the top.

    1.1. **Using the top fill in the bar look at any state's data and over any time period.**
    1.2. **What is the number of tornadoes of magnitude 3 present in Florida from 1980 to 1990?**
        1.2.1. 6
    1.3. **What is the total number of magnitude 5 tornados that have occurred in Oklahoma?**
        1.3.1. 8
    1.4. **How many tornadoes occurred in 2014 in Ohio?**
        1.4.1. 20
2. Next, we [Shivani K., Jack D., and Riddhiman A.] will provide the subject with the same storm watcher web app, version 2.

    The subject will answer the next 3 bolded questions using the filter bar on the side. The responses will be recorded and compared to our [Shivani K., Jack D., and Riddhiman A.] gold-standard answers for minimum and the maximum tornados in an area.

    2.1. **Using the filter in the sidebar look at any state's data and over any time period.**
        2.1.1.
    2.2. **What is the number of tornadoes of magnitude 3 present in Florida from 1990 to 2000?**
        2.2.1. 5
    2.3. **What is the total number of magnitude 5 tornados that have occurred in Texas**
        2.3.1. 6
    2.4. **How many tornadoes occurred in 2015 in Ohio?**
        2.4.1. 7

The following questions are used to collect important background information from our users

Questionnaire
1. Which state do you think has maximum tornados in a given year?
2. What magnitude of tornadoes do you think are most likely to occur in Wisconsin next year?
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5
3. Before today, how familiar were you with the distribution of tornadoes and their magnitude?
    a. Very familiar
    b. Somewhat familiar
    c. Neither familiar nor unfamiliar
    d. Somewhat unfamiliar
    e. Very unfamiliar
4. After today, how familiar were you with the distribution of tornadoes and their magnitude?
    a. Very familiar
    b. Somewhat familiar
    c. Neither familiar nor unfamiliar
    d. Somewhat unfamiliar
    e. Very unfamiliar
5. What is your age? (range)
    a. 18-20
    b. 21-29
    c. 30-39
    d. 40-49
    e. 50-59
    f. 60+
6. Regardless of your previous answer, how would you describe your race? Choose all that apply.
    a. White
    b. Black or African American

  c. East Asian

  d. South Asian

  e. Pacific Islander or Hawaiian

  f. Middle Eastern or Arab

  g. Native American or First Nations

  h. Central American Native, South American Native, Chicano, or Mestizo

  i. Other (please specify) _____

7. How do you identify your gender? Choose all that apply.

  a. Man

  b. Woman

  c. Intersex

  d. Transgender male

  e. Transgender female

  f. Non-Binary

  g. Gender fluid

  h. Questioning

  i. Other (please specify) _____

8. What is your education level?

  a. Less than a high school diploma

  b. High school diploma or GED

  c. Some college

  d. Currently enrolled in college

  e. Bachelor's degree

  f. Master's degree

9. What state do you reside in?

10. What state does your family reside in?

Link to our survey:

https://marquette.az1.qualtrics.com/jfe/form/SV_bEgBpQGAea4kjLT