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EPBI 414 HW 2

**Part 1**

1. Types of epistemic models and examples
   1. Quantification
      1. Height
      2. Weight
      3. Number of siblings
   2. Classification
      1. Race
      2. Sex
      3. Mutant/wild type
   3. Networking
      1. Family members
      2. Government branches
      3. Where locations are relative to one another
   4. Other : Reliability
      1. A person’s responses to a questionnaire may be considered reliable or unreliable due to dementia or truthfulness, etc.
      2. Statistics/studies can be considered reliable or not based on level of confidence, methods used, etc.
      3. A person may answer a knowledge based question that is not common knowledge and that answer is completely dependent on what that person happens to know. E.g. an engineer is more likely to give a reliable answer to a structural integrity problem than a question about Shakespeare
2. Broad question with 3 ante hoc abstractions to make better
   1. Broad: What is your favorite type of food?
   2. 3 abstractions
      1. Do you prefer another country’s food more than your own?
      2. Which mealtime’s food do you most prefer? (breakfast, lunch, supper)
      3. What is your favorite flavor? (sweet, salty, umami, bitter, sour)
3. Categorical Question that is difficult to tell between missing and entry error
   1. Original: What is your blood type?
      1. People may only know whether they are A, B, AB, or O and not know the Rh factor
      2. Some people may not know their blood type
   2. Fixed: Which of the following is your blood type? If you do not know or wish to respond, simply mark “I do not know or do not wish to respond”
      1. Answer choices: A+, A-, B+, B-, AB+, AB-, O+, O-, “I do not know or do not wish to respond”
4. 2D array 5x3 to 1D array of 3 sets of 5
   1. 2D

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |
| 3 | 4 | 5 | 6 | 7 |
| 6 | 4 | 2 | 1 | 0 |

* 1. 1D

|  |  |  |
| --- | --- | --- |
| 1,2,3,4,5 | 3,4,5,6,7 | 6,4,2,1,0 |

**Part 2: Errors and Explanations**

1. Subject 14 has an incorrect study ID due to person inputting 4 twice (should read 1014)
   1. Must be between 1000 and 3000
2. Subject 10 does not have consent verification (1 or 2) at all
3. Subject 3 has a form verification date before the form entry date (8/31 vs 9/01)
4. Subject 13 has a form entry date before the subject enrollment date (11/16 vs 11/14)
5. Subject 15 does not have a form verification initialed (should be JA or KN or another)
6. Subject 1 has an enrollment date before 8/01/15 (7/05/15) and before completion date (8/03)
7. Subject 13 has an enrollment date after their completion date (11/16 vs 11/13)
8. Subject 6 has an enrollment date the same as their completion date (enrollment should be before)
9. Subject 7 has none of the four recruitment methods checked (at least one must be checked

**Part 3: Annotate and Data Dictionary**

These are separate