Consider the simple example of electric car ownership. The associated contingency table is the following for questions 1 to 3:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Age | | |  |
|  | 20-39 | 40-64 | 65+ | Total |
| Electric | 65 | 55 | 5 | 125 |
| Not electric | 835 | 1045 | 495 | 2375 |
| Total | 900 | 1100 | 500 | 2500 |

The model that is considered acceptable from a behavioral perspective involves two variables:

* i, defined as the electric car ownership status (yes or no)
* k, defined as the age category (20-39, 40-64, 65+)

The model is defined as

1. What is the dependent variable?

   2. **Electric vehicle ownership**
   3. Age
2. What is the independent variable?

   2. Electric vehicle ownership
   3. **Age**
3. The value of (using the contingency table values) is mostly closely:
   1. 0.0500
   2. 0.0100
   3. **0.0722**
   4. 0.0314
4. A transportation mode choice set is given by C = {car, bus, metro, bike, walk}. If the decision-maker has a car and the trip is less than 1 mile, the choice set is most likely:
   1. {car, bike, walk}
   2. **{car, bus, metro, bike, walk}**
   3. {car, bus, metro}
   4. { bus, metro, bike, walk}