

Research validity

1. What are the design elements (IV, DV)?

DV(IV)

- a. DV - tip percentages,
- b. IV - write a helpful message about an upcoming dinner special on the backs of checks before delivering them to customers

2. What are the potential confounds?

Potential confounds:

- a. Characteristics of the dining party
 - i. Party size,
 - ii. Method of payment,
 - iii. Bill sum
 - iv. Alcohol consumption,
 - v. Mood;
- b. Characteristics of the server
 - i. Attractiveness,
 - ii. Dress,
 - iii. Gender;
 - iv. Politeness,
 - v. Too many visits to table,
 - vi. Smiles;
- c. Server-diner interactions
 - i. Having servers briefly touch their customers,
 - ii. Make additional nontask visits,
 - iii. Squat during their initial interaction with customers,
 - iv. Personalize their interaction by giving customers their first names during the initial contact,
 - v. Display a maximal smile during initial interaction with customers;
- d. Order
 - i. Taste of all the courses,
 - ii. Portion size,
 - iii. Plating Design,
 - iv. Speed of order
- e. And a lot of others.

3. The message written on the back of the check concerned an upcoming special dinner at the restaurant. Is it possible that it was the content of the message, rather than simply a personalized message from the server, that accounts for the results? How might the authors have evaluated this possibility?

Yes, it is possible.

- a. If the message was different, it can be evaluated in two ways:
 - i. Either write the same message or don't write it, or
 - ii. Write different messages (randomly selected from a pool), but always write them and record the difference in tips.

- b. If the message was the same (about seafood), than potential confounding extraneous variable can be whether customer loves or hates seafood.
 - i. It can be evaluated by either having all customers with same seafood preferences, or
 - ii. By having representative in terms of liking seafood sample of customers.

4. Researchers used index cards to randomly assign the dining parties to the experimental and control conditions. What other strategies could they have used for random assignment in this field experiment?

It can be any other method with 0.5 probability of one of two choices. For example,

- a. If customers are coming to the bar randomly, first one can be with message, second without, third with etc. But in this case we should ensure randomness of their coming to the bar.
- b. Application that is giving randomly 1 (message) or 0 (no message) can be used (same as index cards in concept).
- c. Give messages based on seating arrangements. Eg. Person with even seat will get the message and person with odd number seat won't get the message. We should, however, ensure randomness of seating arrangements.

5. Why did the researchers instruct the server to behave in the same way when delivering the check at the end of the meal? What possible threats to internal validity might be created if the server's behavior varied when delivering the check?

To have the same conditions for all customers. It can introduce non-equal conditions. E.g. it can introduce such potential confounding extraneous variables as customer-server additional communications, which will naturally vary for each customer.

6. How might the following aspects of this study limit the study's external validity?

Next aspect can limit external validity in the following ways:

- a. ***A young female adult was the authors' accomplice*** - if she was accomplice, she might bias results by reacting differently for customers with message and without. E.g. for customers with messages server might smile and behave more friendly, while for "unmessed" clients server might be less friendly. This means, potential confounding extraneous variable (in this example, friendliness of server) will be introduced to the experiment. Also, we can say that gender plays a major role as customers may be biased over servers of a specific gender and attractiveness, so generalizability of the current findings thus needs to be examined in future research by varying gender and appearance of servers.
- b. ***The study was conducted at a private country club*** - since it is private, we can assume that the sample size was small and sample was not representative. Also, it is just one type of restaurant so it cannot be generalised. A private country club has customers of same profile and many are served by the same servers for quite a while, which may affect their tipping percentage.

- c. ***The meal was buffet style*** - since only one serving style was introduced, the result cannot be generalised for traditional a la carte meal or 3 course meal with servers.