Answer on Question #55453 – Math – Statistics and Probability

In another experiment to see if getting candy after a meal would induce customers to leave a bigger tip a waitress randomly decided what to d with 80 dining parties. some parties received no candy some just one piece and some two pieces. others initially got just one piece of candy and than the waitress suggested that they take another piece. she recorded her tips received finding that in general the more candy the higher the tip but the highest tip (23%) came from parties who got one piece and than were offered more.

a) diagram this experiment

b) how many factors are there? how many levels?

c) how many treatments are there?

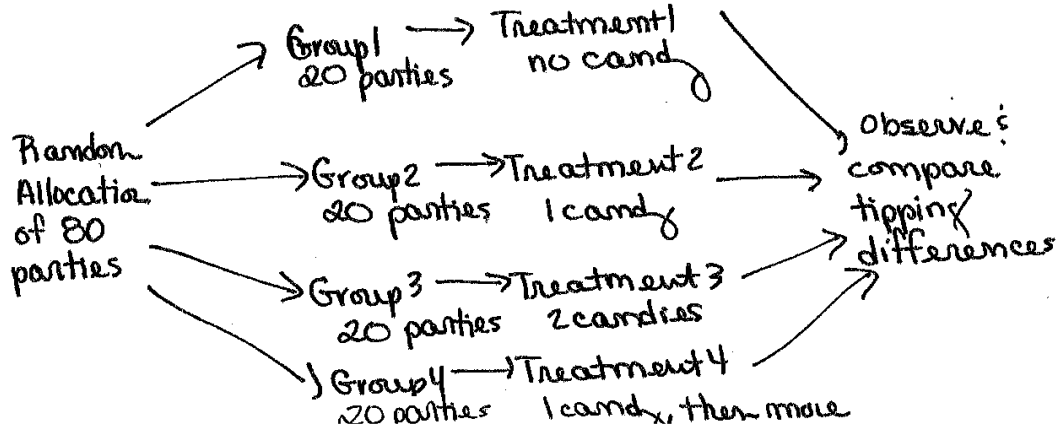
d) where is the response variable?

e) did this experiment involve blinding? double blinding?

f) in what way might have the waitress perhaps unintentionally have biased the results?

Solution

a)



b) 1 factor. 4 levels.

c) 4 treatments.

d) Tip amount.

e) It is single-blinded experiment (diners should be blinded).

f) She may have treated some better than others, unless she randomized for each party at the end of serving them.