**Practice Questions**

*You can use your notes to answer the following questions*

A researcher is interested in the factors which affect behaviour in an emergency situation. They decide to investigate whether the behaviour of others around them can have an effect on people’s reactions to a perceived emergency.

The researcher recruits 40 participants using systematic sampling and then randomly allocates the sample to one of two conditions.

**In condition one** the participant is alone when exposed to an emergency situation

**In condition two** participants are in the presence of confederates when they are exposed to the emergency situation. In condition two, the confederates have been instructed by the researcher not to respond to the emergency situation until the true participant reacts.

The experiment begins by the participants being placed into a room to complete a ‘test’ (either alone or with confederates). After 10 minutes (fake) smoke starts to be pumped under the door, suggesting the next room door is on fire (this being the perceived emergency situation). The researcher measures the amount of time it takes for the participant to react.

The researchers’ results are below:

Table 1: A table to show the mean reaction time participants take to react to an emergency alone or in the presence of confederates.

|  |  |  |
| --- | --- | --- |
|  | **Participant alone** | **Participant with confederates** |
| Mean reaction time (secs) | 206  | 515 |

Identify the independent and dependent variables in this study (2+2)

Write an operationalised non-directional hypothesis for this study (2)

Identify the experimental design used in this study (1)

Give one strength and one weakness of this experimental design (2 + 2)

Give one way of overcoming the weaknesses you identified with this experimental design (2)

Identify extraneous variables which needed to be controlled in this research (2)

Identify the sampling method used (1)

What is meant by random allocation? (2)

Why did the research choose to randomly allocate the participants to each condition? (2)

Draw a graph of the results (3)

What do the findings of this research suggest about the effect of the presence of others on the reactions to perceived emergency situations? (2)

Identify possible ethical issues associated with this research (3)

Write a debrief which the researcher could have used at the end of the research. It should explain the true aims and procedures of the research, information about how their findings will be used and a reminder of their ethical rights. (6)