Data Interpretation

Fakedata & Fraud (2001) wanted to find out whether Psychology students were better looking that non-Psychology students. 20 Psychology students and 20 control participants were independently rated for attractiveness by a female psychology lecturer on a scale of 1 (least attractive) to 5 (most attractive). The ratings are given below.

PP number	Psychologists	Non-psychologists
1	2	2
2	5	2
3	4	4
4	3	3
5	3	2
6	4	5
7	2	3
8	2	4
9	1	4
10	4	3
11	3	2
12	3	2
13	2	1
14	4	2
15	3	4
16	1	2
17	5	3
18	4	3
19	5	5
20	5	2

1. State a suitable null hypothesis for this investigation.

2. Calculate the mean attractiveness ratings for the two groups in the study.

3. Draw a frequency histogram to illustrate the results of this study. Make sure you give it a title and label the axes.

4. Explain, by referring to the frequency histogram, why the mode is an unsuitable measure of central tendency for this data set.

5. Suggest whether the researchers would be able to accept their alternative hypothesis.

6. Identify and explain one design flaw in this investigation and suggest how it could be corrected.