

Question 3

A researcher recruited a volunteer sample of 20 male football fans from a local supporters' club. They were all fans of Squatney United FC. The participants were randomly allocated to two groups. Each group was shown a 5 minute video consisting of a compilation of clips showing goals scored during football matches involving Squatney United FC. One group was shown a video in which all the goals were scored by Squatney players. The other group was shown a video in which all the goals were scored against Squatney. After viewing the clip, the researchers took a saliva sample from each participant. The samples were tested to estimate each participant's level of blood testosterone.

Table 3 - Participants' testosterone levels after viewing goals for or against their football team.

Testosterone level (ng/dl)	
Viewed goals for	Viewed goals against
348	459
735	601
591	352
894	1305
994	508
426	314
595	472
730	587
427	623
953	481

- (a) Explain how the researcher could recruit the participants in this study? (2 marks)
- (b) Explain why the participants were randomly allocated to the two groups in this study? (2 marks)
- (c) State which participant design was used in this study. (1 mark)
- (d) Explain one variable the researchers would need to control in this study. (2 marks)
- (e) Calculate the median testosterone level for the 'goals scored against' group. (1 mark)
- (f) Explain why the researchers chose not to use the mean as their average measure of testosterone levels. (2 marks)