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# Psychology Higher level Paper 3

7 November 2024

Zone A morning | Zone B morning | Zone C morning

1 hour

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## Instructions to candidates

- Do not open this examination paper until instructed to do so.
- Read the passage carefully and then answer all the questions.
- The maximum mark for this examination paper is **[24 marks]**.

The stimulus material below describes a study on the psychological effects of colour. The aim was to investigate whether the colours in indoor spaces have an effect on mood.

Colours can be grouped into warm or cool. Warm colours include red, orange, and yellow. Cool colours include blue and green. Previous research into the effect of colour on people's moods found that cool colours are calming and that warm colours are energizing.

5 This study took place in the students' centre on a university campus. The centre is used for studying, eating, and meeting up with friends. The different indoor areas all have their own colour schemes. The main colour in the library is blue. The colours in the spaces used for socializing are reds and yellows. The cafeteria is mainly white.

10 The researcher handed out a sheet of paper with questions on it to people in the different indoor areas of the students' centre. A cover page was attached to each question sheet. The cover page informed people that the questions were part of a study into the psychological effects of colours. It also stated that by filling out and returning their responses within 48 hours, the participants were giving their consent. The cover page included instructions for completing the questions. The instructions asked people not to give their names or any other identifying information in their responses. The researcher's contact information was also included on  
15 the cover page.

20 The researcher visited the centre at different times of the day and approached people to ask if they were available to take part. An attempt was made to hand out a similar number of question sheets in each of the indoor areas. Of the 490 participants who answered and returned their responses, 254 were male and 236 were female. The mean age of the participants was 21.6 years.

The answers to the questions were analysed by the researcher, and several outcomes were identified, for example:

- Participants felt that their excitement levels increased when they entered the red and yellow socializing areas.
- 25 • The cafeteria was the area in the centre where participants felt the most bored.
- Most participants felt that the colour of their favourite areas positively affected their mood.

The researcher concluded that the colours of the indoor areas in the students' centre have a psychological effect on the mood of the people who use them.

Answer **all** of the following three questions, referring to the stimulus material in your answers. Marks will be awarded for demonstration of knowledge and understanding of research methodology.

1. (a) Identify the research method used and outline **two** characteristics of the method. [3]  
(b) Describe the sampling method used in the study. [3]  
(c) Suggest **one** alternative **or one** additional research method that could be used to investigate the aim of the original study, giving **one** reason for your choice. [3]
  2. Describe the ethical considerations that were applied in the study and explain if further ethical considerations could be applied. [6]
  3. Discuss how the researcher in the study could avoid bias. [9]
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**References:**

[Stimulus material] Kurt, S. and Osueke K. K., 2014. The Effects of Color on the Moods of College Students. *SAGE Open*, 4(1). [online] Available at: <https://journals.sagepub.com/doi/10.1177/2158244014525423> [Accessed 31 August 2023]. Source adapted.