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Diploma Programme
Programme du diplôme
Programa del Diploma

Psychology
Higher level
Paper 3

Friday 22 November 2019 (morning)

1 hour

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]**.

8819 – 5705

3 pages

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The stimulus material below describes a study on the influence of knowledge of stereotype threat on women's math performance. Stereotype threat means that people believe a negative stereotype about themselves.

Previous research on stereotype threat and math suggests that women who are reminded of their gender before taking a math test will underperform compared to women who are not reminded of their gender.

The aim of this study was to test if teaching about the potential effect of stereotype threat before a math multiple-choice test helps women to perform better.

A convenience sample of 80 female university students taking a course of introductory statistics (N=80) and with a mean age of 19.5 years was selected. Participants received extra credit for participation. The female experimenter informed participants about the study and before the participants signed an informed consent form, she informed them about their rights to confidentiality and anonymity and about their rights to withdraw themselves or their data at any time. They were not fully informed about the purpose of the study until debriefing.

The participants were randomly allocated to one of two conditions:

- Condition 1 (math-test): participants were told that they would take an easy standardized math test for a study on gender and mathematical performance.
- Condition 2 (math-test and teaching intervention): participants received the same instructions as in condition 1, but the researcher also gave a brief lecture on the stereotype threat and said that women could experience anxiety due to the negative stereotypes of women and math. However, a stereotype had nothing to do with them and how well they might do on the test.

All participants were asked to write their gender on the tests, and then they had 30 minutes to complete the math test.

The results showed that participants in condition 1 scored lower than participants in condition 2. The researcher concluded that knowledge of the stereotype threat had resulted in the better performance in condition 2. They suggested that teaching about stereotype threat could help other women to attribute anxiety about math to the stereotype and not to themselves.

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 an alternative or additional research method 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]