

## WRITTEN EXERCISE for 2016

Is cognitive therapy necessary for the treatment of simple phobias? To investigate this issue, Smith and Jones (2010) recruited 50 children, aged 8-12, from a school in a socially-deprived area by means of an advert on the school's intranet. The advert asked for people who were afraid of any kind of animal and were interested in taking part in a research project. The advert invited those interested to attend a lunchtime meeting. At this meeting, a brief talk was given outlining the project. Children were informed that those who participated would receive an iPad at the end of the study. Those who were interested remained behind and were asked to sign a consent form on which they agreed that they had been given information about the project and that they took part willingly.

The 50 participants were randomly allocated to two groups, each containing 25 participants:

- Exposure therapy: This was delivered across 3 sessions, each lasting 20 minutes. For each child, a hierarchy of anxiety-provoking situations concerning the animal they feared was developed, progressing from the least feared situation to the most feared; the child was exposed to the least feared situation first; and exposure to the next situation in the hierarchy happened when the child reported feeling reasonably comfortable in the previous situation.
- Exposure therapy plus cognitive therapy: The participants in this group received the same intervention as the second group (i.e. 3 sessions of exposure therapy), but they also received a session of cognitive therapy (in between the first and second sessions of exposure therapy) in which they were encouraged to talk about their beliefs about the animal and what negative outcomes may occur if they came into contact with the animal, and supported to challenge those fears through cognitive therapy techniques.

Outcome was evaluated by means of a previously published self-report scale measuring animal phobias in children. A standardization study on children who met DSM-V criteria for specific phobia indicated that the measure has good reliability and validity. Higher scores on the measure indicate more fear. Minimum possible score on the measure is 10 and maximum possible score is 75. In the standardization sample, the mean was 50.

The scale was administered twice: once before the start of the intervention; and once at the end of the last session of exposure therapy. The means are reported in Table 1 below.

Table 1: Mean self-ratings of fear for the two groups across the two time periods

	Pre-intervention	Post-intervention
Exposure only	28	20
Exposure plus cognitive therapy	29	19

A two-way ANOVA (group x time) was used to analyse the data. Two post-hoc analyses were also carried out, one comparing pre- and post-scores for the exposure-only group, and one comparing pre- and post-scores for the exposure-plus-cognitive-therapy group. The outcome of the analyses are summarised in Table 2.

Table 2: ANOVA showing main and interaction effects

	F-value	p-value
MAIN EFFECTS		
Group (Exposure vs. exposure-plus-cognitive-therapy)	2.35	.421
Time (Pre vs. post treatment)	4.82	.013
INTERACTION EFFECT		
Group x time	1.89	.657
POST-HOC TESTS		
Effect of time for exposure group	3.65	.034
Effect of time for exposure-plus-cognitive-therapy	3.12	.045

### **Instructions for completing the test**

- Please answer all questions. You will not pass if you fail to answer one or more of the questions.
- Please indicate clearly on your script which question you are answering.
- Your answers will be marked on your written presentation as well as on content. You will not pass the test if your written presentation fails to meet the minimum standard. Therefore:
  - Please ensure that you write in full sentences. Do not write in note form.
  - Avoid errors of punctuation, spelling and grammar.
  - Take time to proofread your answers at the end, and ensure that your meaning is clear.

**Question 1: Write a summary of the results, focusing on what the analyses suggest about the effectiveness of the interventions. What are the potential clinical implications of the study? (6 marks)**

**Question 2: What reasons are there to be cautious about drawing these implications for clinical practice that you have highlighted in your answer to Question 1? In your answer, focus on weaknesses in the methodology of the study, describing what the weakness is and explain why it undermines confidence in drawing these implications. Confine your answer to three methodological issues that you consider most relevant. (6 marks)**

**Question 3: Suppose you were on a research governance committee asked to review the ethics of the study following a complaint from several parents. What issues about the process of recruitment and consent, described above, would concern you? Confine your answer to the three issues that you consider most relevant. (6 marks)**

**Written presentation: 8 marks**