

WRITTEN EXERCISE 2018 INTAKE

Intensive Interaction is a therapeutic approach for promoting social interaction in individuals with severe communication impairments. The therapy involves the therapist/carer observing what the person with the communication impairment is doing; trying to understand the focus and motivation of the behaviour; and then 'joining in' by using the same movements, vocalisations, direction of eye gaze etc. The therapy is inspired by observational research on parent-baby interactions. It is suggested that matching the behaviours enables the person with the communication impairment to recognise the behaviour of the therapist/carer as a response to their own behaviour, and that this then lays the foundation for a mutual interaction in which each person makes a response and observes the response of the other.

Mainwaring and Wilson (2015) evaluated the effectiveness of Intensive Interaction with 10 individuals with profound learning disability and no apparent language ability. The participants attended a day centre for adults. The purpose and nature of the research was explained to staff in an oral presentation. Staff were asked at the end of the meeting to nominate suitable people to take part, and to sign a form indicating that they consented to the participation of the person they had nominated. The intervention consisted of a 30-minute session with each individual participant. One of the researchers spent the first 5 minutes observing the participant to gain an idea of their interests and behaviours. Over the next 25 minutes, the researcher remained within 1 metre of the participant and within the participant's field of vision, and implemented Intensive Interaction. Videos were made of the sessions and used to evaluate the effectiveness of the intervention. One of the researchers coded the behaviours of the participant as follows: Eye gaze – either at the communication partner (i.e. the researcher conducting the session) or away; bodily orientation – either at the partner or away; emotional valence – either negative or positive (valence considered neutral was not coded). For each variable, the percentage of time in a 5-minute period was calculated for each possible outcome (e.g. 2 minutes and 45 seconds looking at the communication partner, 2 minutes and 15 seconds looking away). Gaze at the partner, bodily orientation towards the partner and positive emotional valence were taken as evidence of social interaction.

To evaluate the effectiveness of the intervention, time spent in the first 5 minutes was compared to time spent in the last 5 minutes, and, for each participant and for each variable, it was determined whether there was an increase in time spent in more social interaction (e.g. more eye gaze), or the time spent was the same or had declined. A general z-test (similar to a t-test) was used to calculate whether the percentage of participants who showed an increase was significantly above chance. It was assumed that 50% of participants would be likely to show an increase by chance, and the alpha level was set at .05. Results are shown in Table 1. Someone not otherwise involved in the research coded 10% of the videos: Cohen's kappa (a measure of inter-rater reliability) was 0.64 for eye gaze, 0.59 for body orientation and 0.32 for emotional valence.

Table 1: Patterns of change in percentage of time spent in social interaction between the first 5 and the last 5 minutes of the session and the probability of such a distribution occurring by chance.

Variable	Number of participants showing an increase	Number of participants showing a decrease or no change	z-value and p-value (two-tailed)
Eye gaze	9	0	$z=2.530$; $p=.020$
Bodily orientation	8	1	$z=1.897$; $p=.056$
Emotional valence	6	4	$z=0.632$; $p=.527$

Instructions for completing the test

You must answer all questions. You will not pass the test if you omit to answer one or more of the questions.

If you are completing the test on paper, please indicate clearly on your script which question you are answering. This is not necessary on the computerised version.

Your answers will be marked on your written presentation as well as on content. 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.**

The number of marks awarded for each question is capped. When you are asked to confine your answer to, for example, three issues, please note that you will be marked only on your answers to three issues. You will not be given extra marks for more than three, so do not waste time adding more.

You must not access the internet during the exam, anyone caught doing so will be disqualified.

Do not press the final save/submit button until you are sure you have finished the whole test as you will not be able to go back in again. You can, however, save individual questions as you go along and you can go back into them. The system also saves automatically on a regular basis.

Question 1 (6 marks): What do you think were the methodological limitations of the study? In your answer, (a) state what the limitation is and (b) explain why it creates difficulties in drawing conclusions from the study. You will get fewer marks if you just state a limitation without explaining how this limits the conclusions that can be drawn. Confine your answer to three issues that you consider most relevant. This is a question about the research methodology used to evaluate the therapy, not about the therapy itself: You will not be awarded marks for opinions about the rationale for the therapy, or about its potential value.

Question 2 (6 marks): In one or two sentences, write a brief summary of the results (such as they might appear in the abstract of a paper). What limitations do you think there were in the way the authors decided to analyse the data? In your answer, (a) state what the limitation is and (b) explain why it creates difficulties for the interpretation of the findings. You will get fewer marks if you just state a limitation without explaining it. Confine your answer to two limitations that you consider most relevant.

Question 3 (6 marks): (a) What ethical concerns do you have about the process of gaining consent in this study? In your answer, state what your concern is and explain how you would address it. (b) The researchers conducted no assessment of the risk of adverse outcomes for the participants. What potential risks needed to be assessed and how could the risks have been minimized? Confine your answer to the one risk that you consider particularly relevant.

Question 4 (6 marks): Suppose you were working with someone with profound learning disability and the benefits of more social interaction with her family was highlighted by your assessment. What issues would you consider in deciding whether to use Intensive Interaction? Confine your answer to three issues that you consider most relevant.