

**Question 12** (10 marks)

Professor Trueman wanted to investigate the effectiveness of an international student immersion program for reducing acculturative stress for university students who have come to Australia on a student visa for the duration of the degree.

Professor Trueman called for volunteers from Winter University who had enrolled in a three-month immersion program for international students immediately prior to commencing their degrees. The program aimed to help students with language, cultural changes and dealing with racial prejudice. 155 students agreed to participate in the survey.

Professor Trueman collaborated with Summer University, which did not have an immersion program, asking for volunteers to also take part in the experiment. 177 students from Summer University agreed to participate.

The experiment required the volunteer participants to complete a pre-semester one survey within a week of arriving in Australia, and then a follow-up survey after the completion of their first semester. The survey asked a series of questions relating to the anxiety and stress they felt in relation to studying in Australia.

The results are presented in the tables below.

**Table 1** Results for survey responses from Winter University international students

	<b>Pre-semester one responses (scored from 0–5)</b>	<b>Post-semester one responses (scored from 0–5)</b>	<b>Change in score from pre- and post-survey responses</b>
<b>Anxiety level about language barriers (0 = no anxiety, 5 = extreme anxiety)</b>	3.6	2.1	–1.5
<b>Anxiety level about dealing with cultural changes</b>	3.3	1.9	–1.4
<b>Anxiety level about dealing with racial prejudice</b>	3.2	3.0	–0.2

**Table 2** Results for survey responses from Summer University international students

	<b>Pre-semester one responses (scored from 0–5)</b>	<b>Post-semester one responses (scored from 0–5)</b>	<b>Change in score from pre- and post-survey responses</b>
<b>Anxiety level about language barriers (0 = no anxiety, 5 = extreme anxiety)</b>	3.8	3.2	–0.4
<b>Anxiety level about dealing with cultural changes</b>	3.4	3.5	+0.1
<b>Anxiety level about dealing with racial prejudice</b>	3.6	3.6	0

Based on statistical analysis of the results from the two groups of students, Professor Trueman concluded that the immersion program for international students had successfully reduced the anxiety levels of students, based on the  $p$ -value  $< 0.05$ .