

# The Effect of Horticultural Activities on Stress and Social Interaction Anxiety on College Students

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## Background



The mental health status of college students has become a worry in recent years as student suicide cases have risen. More than 9% of them were college students, with academic and interpersonal relationships being the most perplexing problems for them. Moreover, students have interpersonal difficulties and anxieties after the 3-year outbreak of COVID-19. Since the pandemic has limited social activities, students have all switched to online study and have not had face-to-face lessons. It has limited students' opportunities for interaction with others, affecting their social abilities. College students' mental health and interpersonal abilities were affected. It can be seen that college students need assistance in terms of mental health and social aspects.

## Research Objectives

- 1) To investigate the reduction of stress in college students after the horticultural activities.
- 2) To find out the effect of the horticultural activities on social anxiety in college students.

## Methodology

- ✦ A quasi-experimental study with an experimental group conducted horticultural activities and a control group
- ✦ 20 participants were recruited
- ✦ Required to attend a six-week horticultural activities programme (Experimental group)



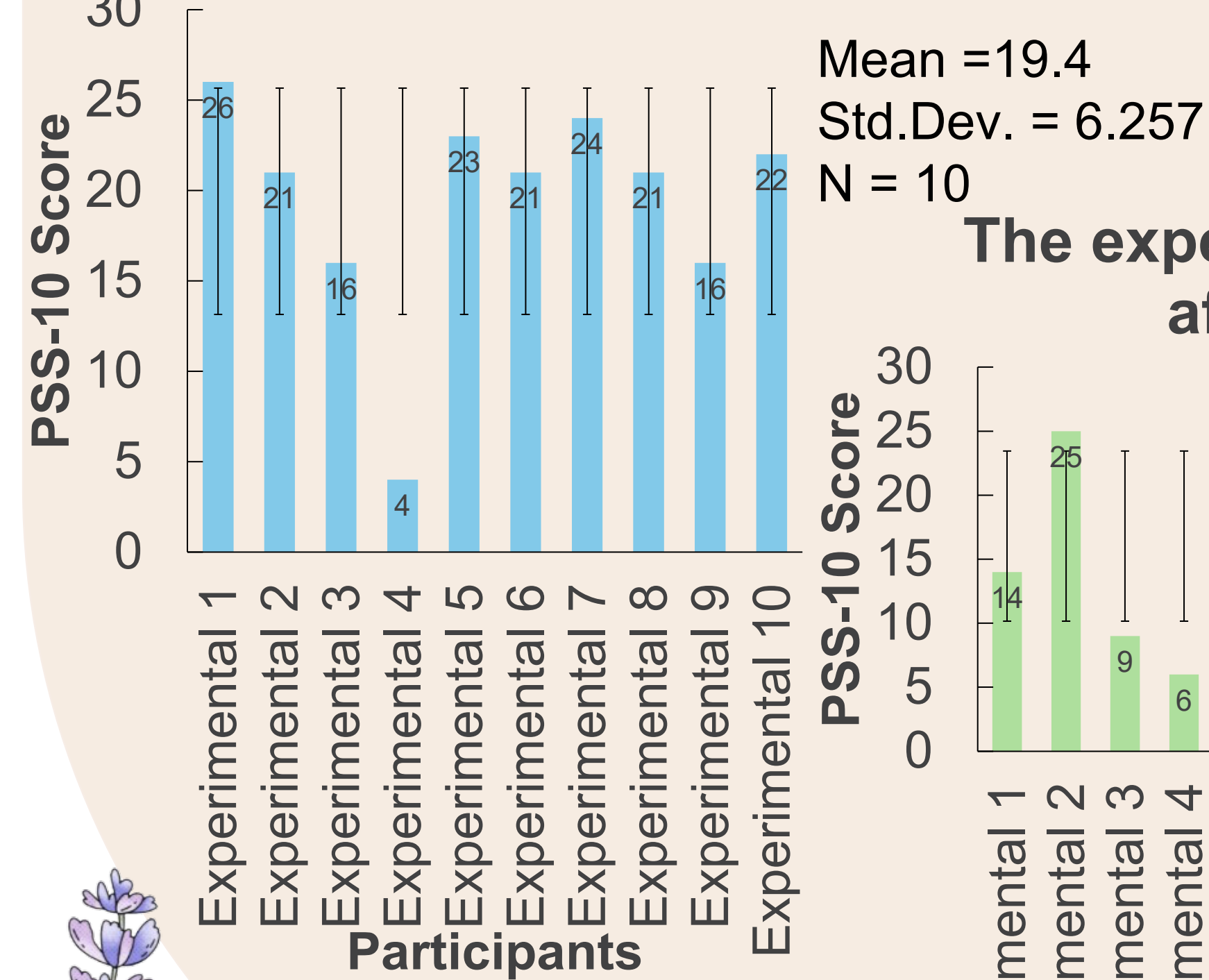
- ✦ Pre-and Post-intervention (The first and last lessons)
- ✦ Outcome measurement: The Chinese 10-item Perceived Stress Scale (PSS-10) & Social Interaction Anxiety Scale (SIAS)

## Findings

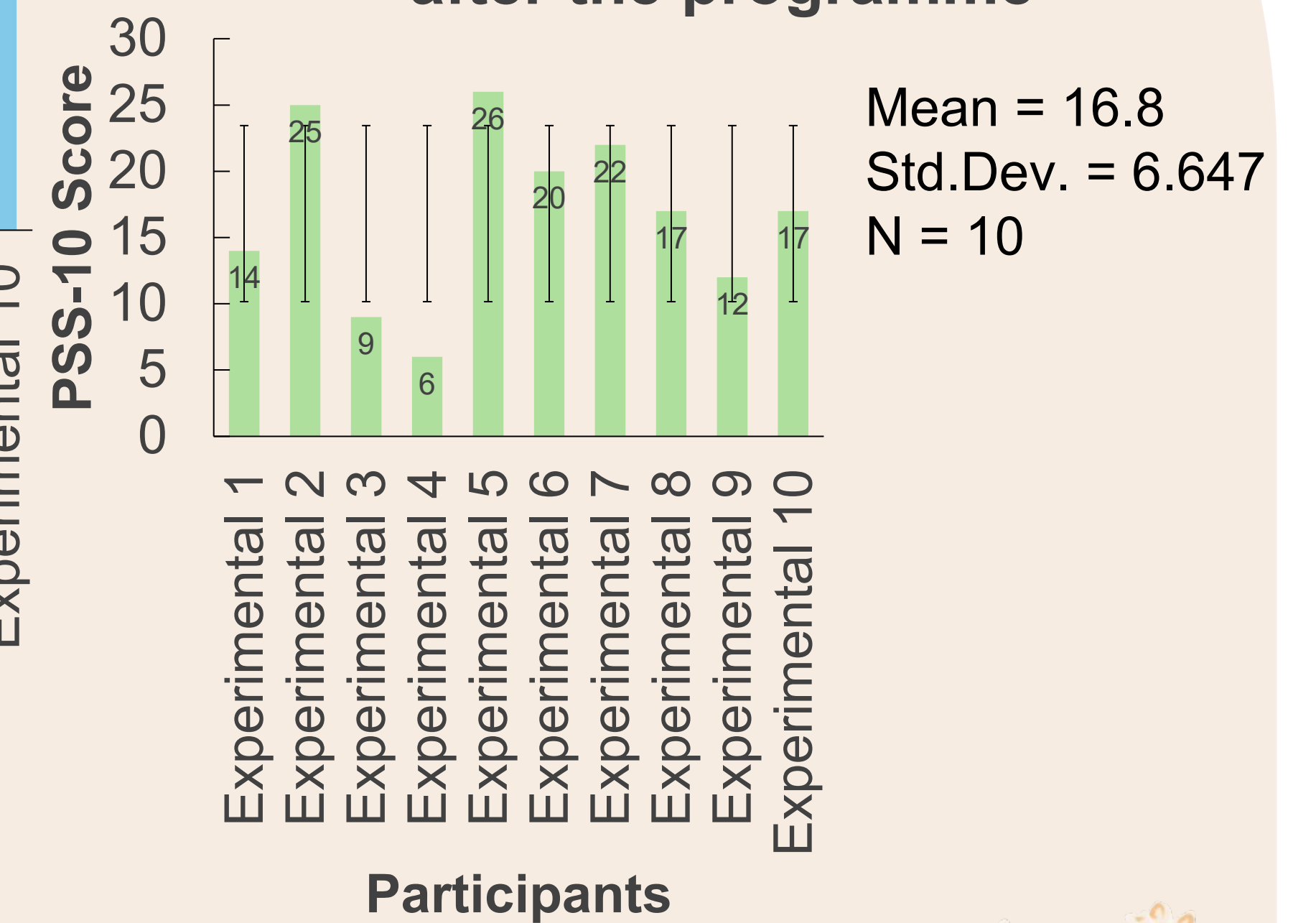
Compare PSS-10 & SIAS results of experimental group

The result of PSS-10 (Experimental group)

The experimental group of PSS-10 before the programme

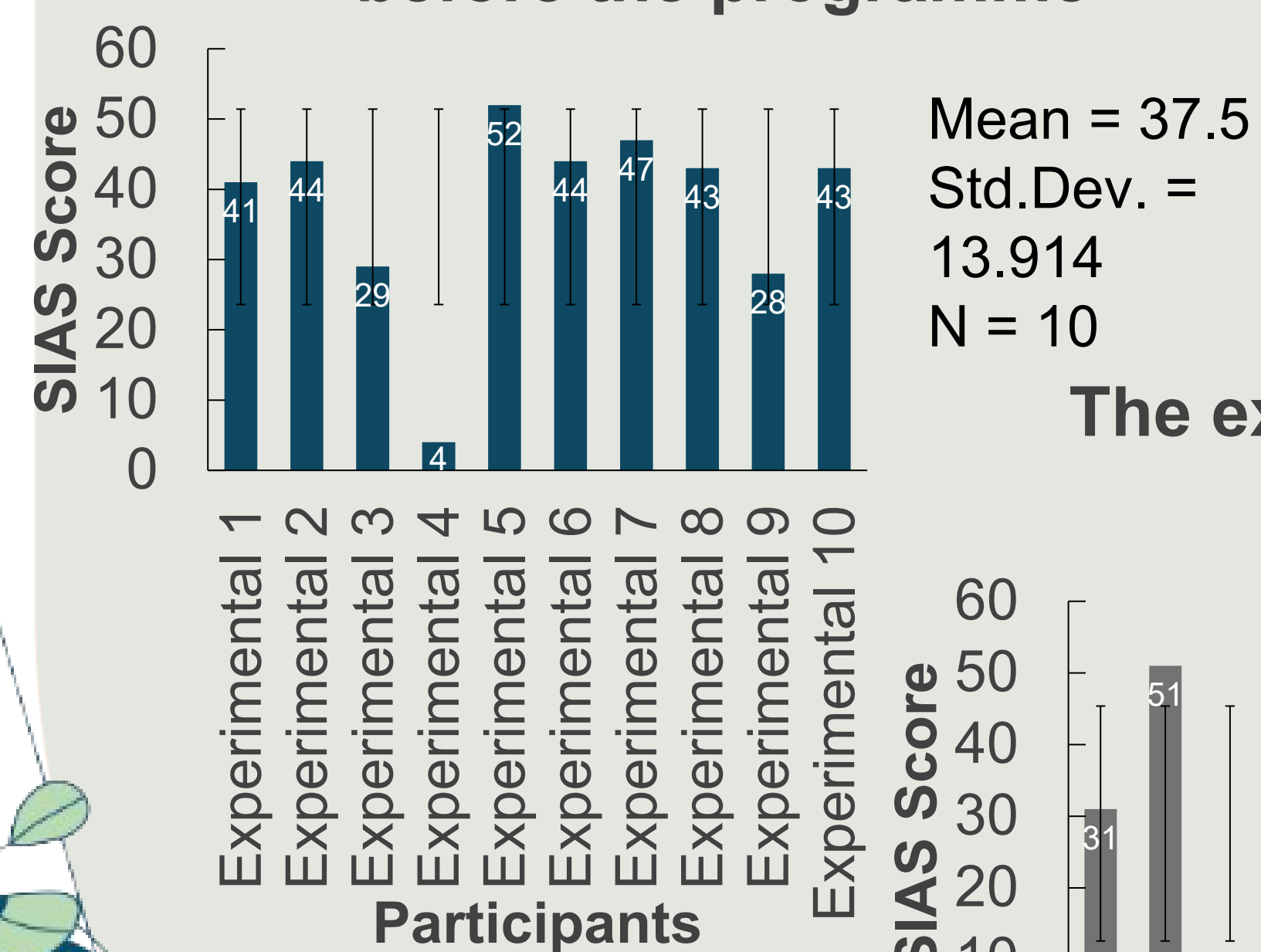


The experimental group of PSS-10 after the programme

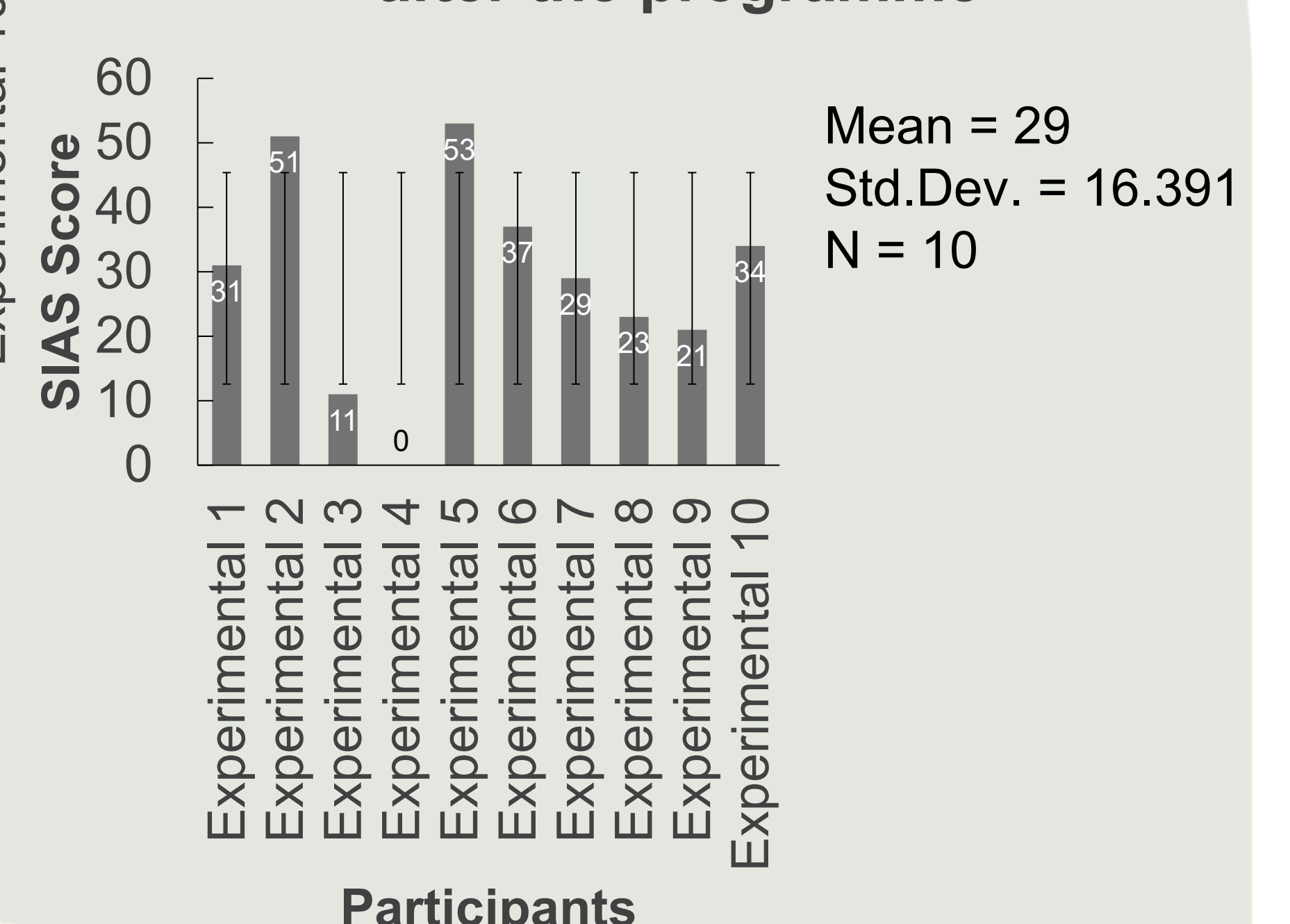


The result of SIAS (Experimental group)

The experimental group of SIAS before the programme



The experimental group of SIAS after the programme



The result showed that horticultural activities decreased the social anxiety of college students, presenting a statistically significant ( $p = 0.021$ ), and had a difference when compared to intergroup. It may also reduce their stress, but there was no statistically significant ( $p = 0.125$ ).

## Conclusion

The horticultural activities demonstrate to be a great intervention method for mental health. The result of the study provides a preliminary investigation to understand the potential positive impact of horticultural activities on college students. It also provides important information and references for further studies.