
Predicting Satisfaction Among the Students on E-learning Under the Pandemic Situation

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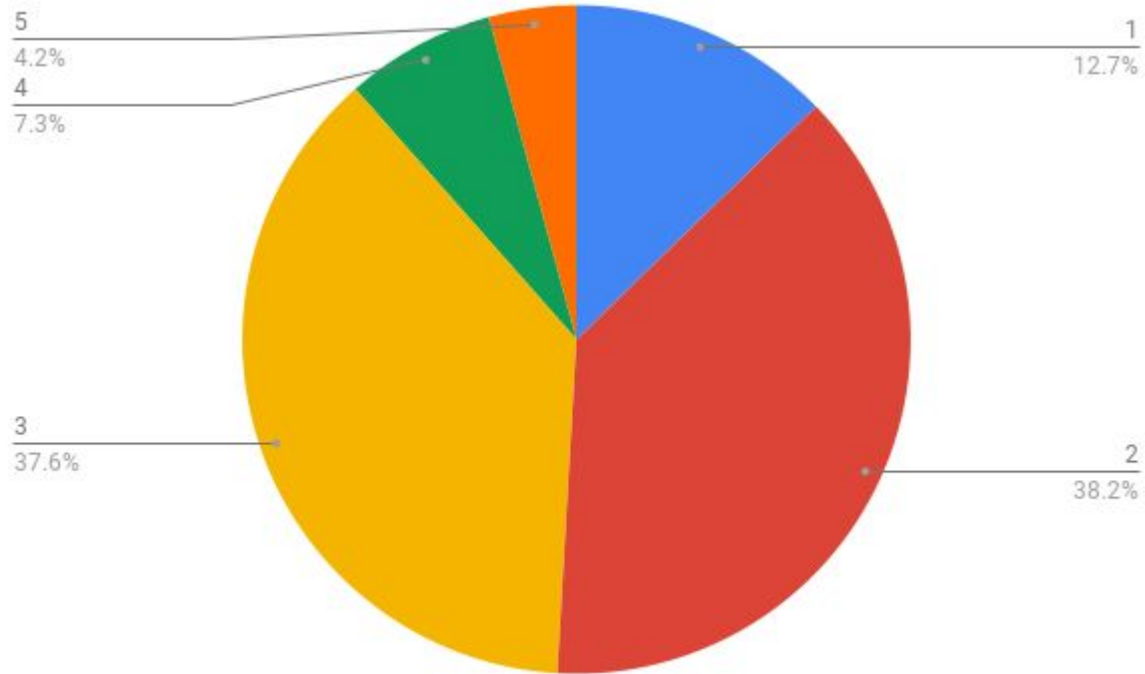
Introduction

- This anonymous survey is conducted online, targeting undergraduate students of government universities in Sri Lanka who have been receiving online education during the pandemic.
- The questionnaire was distributed among students using a Google form.
- There were different question types on different aspects
 - multiple-choice questions
 - Dropdowns
 - Linear scale
- 165 total responses were received.

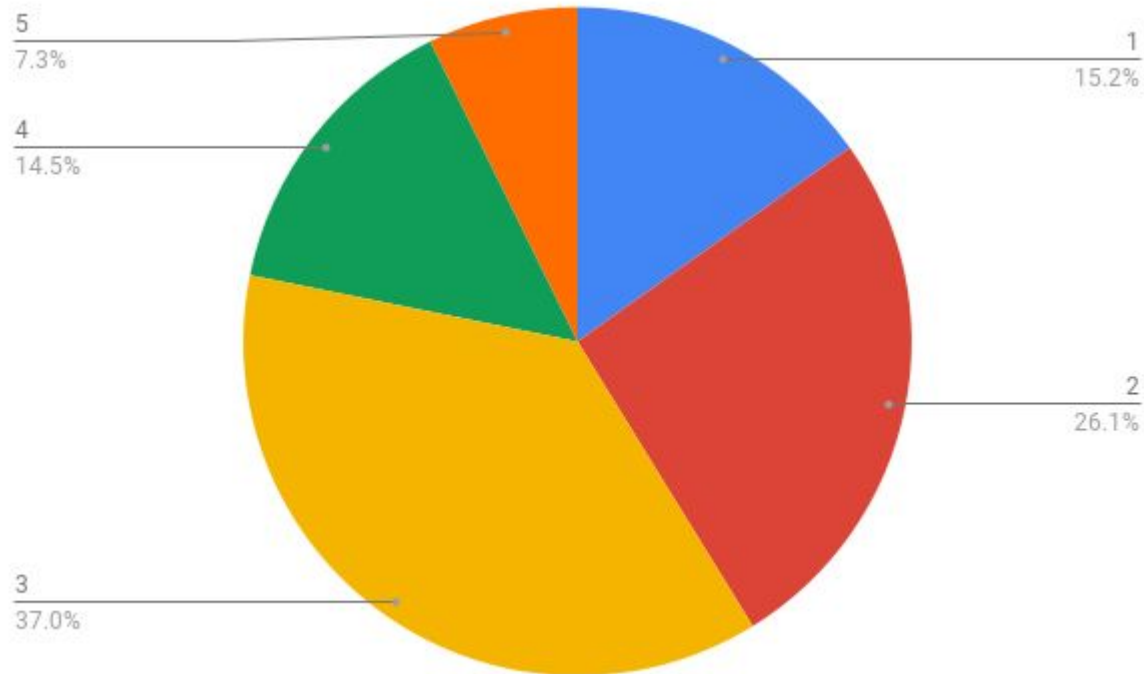
Aspects of the Questions

- Gender
- Living status (Hometown, Income)
- Accessibility to devices
- University, course and academic year
- Internet Service Provider and connection
- Time spent on e-learning
- Interactions during lectures
- Quality of teaching and exam conduction
- Extracurricular activities and engagement with batchmates

Level of Student Engagement with Extracurricular Activities



Level of Student Favouration for E-learning over In-premises Learning



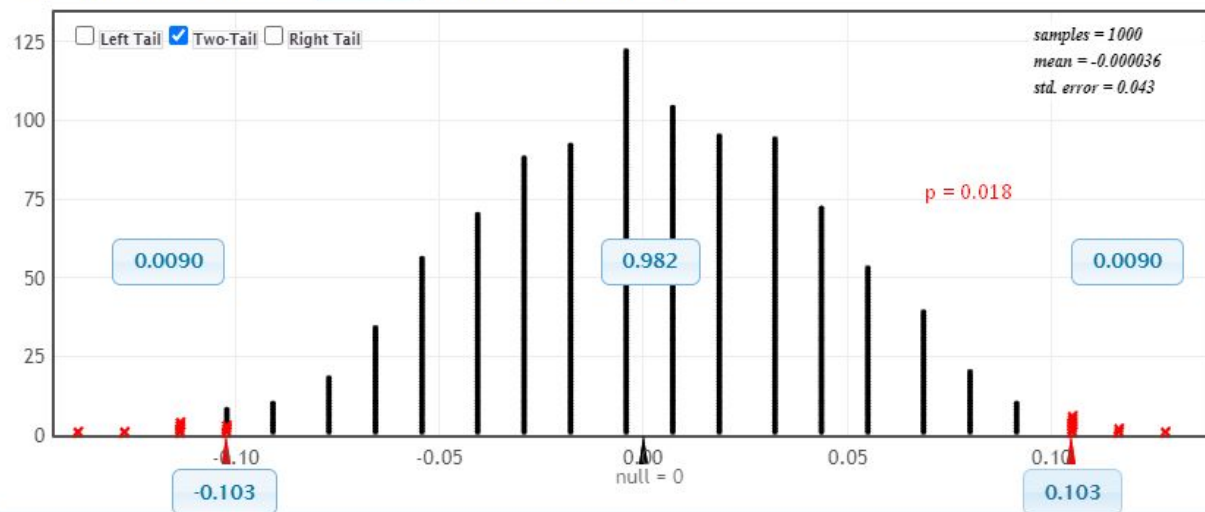
Hypothesis Testing

Does dissatisfaction towards e-learning not cause by students' levels of engagement in extracurricular activities that the university conducts?

- p_a - proportion of students engaged in extracurricular activities to a unsatisfactory level = 0.885
- p_e - proportion of students dissatisfied with e-learning over in-premises learning = 0.782
- $H_0 : p_a = p_e$
- $H_a : p_a \neq p_e$
- $p_a - p_e = 0.103$

Hypothesis Testing

Randomization Dotplot of $\hat{p}_1 - \hat{p}_2$ Null Hypothesis: $p_1 = p_2$



Original Sample

Group	Count	Sample Size	Proportion
Group 1	146	165	0.885
Group 2	129	165	0.782
Group 1-Group 2	17	n/a	0.103

Randomization Sample

Group	Count	Sample Size	Proportion
Group 1	143	165	0.867
Group 2	132	165	0.800
Group 1-Group 2	11	n/a	0.067

Conclusion

- p value = 0.018, which is less than 0.05 significance level
- Therefore, we can reject the null hypothesis
- Hence, dissatisfaction towards e-learning not cause by students levels of engagement in extracurricular activities that the university conducts
- This survey was filled by students from only few universities in Sri Lanka. Therefore, there might be a volunteer bias.

Thank You