

Analysis of Covid-19 Impact on College/University Students' Lives

Table of Contents

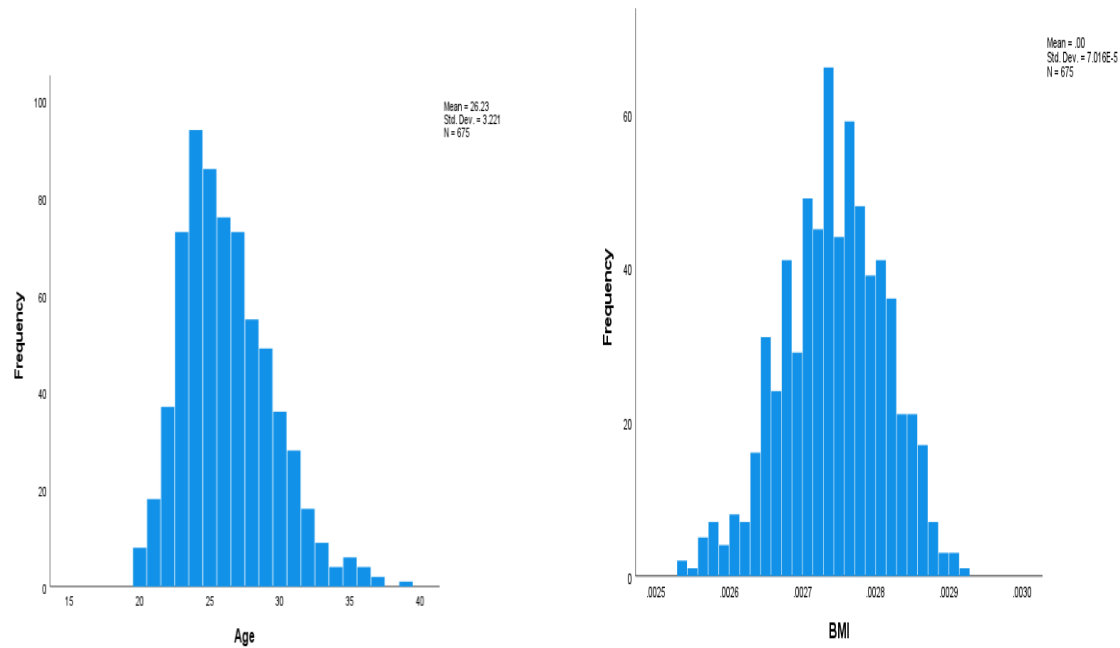
Introduction:	2
DESCRIPTIVE STATISTIC FINDINGS AND REPORTS	2
Age Distribution Interpretation:	3
BMI Distribution Interpretation:.....	3
Interpretation of Gender Distribution:	4
Interpretation of Health Condition Distribution:.....	4
Interpretation of Level of Study Distribution:.....	5
Interpretation of Marital Status Distribution:	6
Interpretation of Wealthy Background Distribution:	7
Interpretation of Economic Status Distribution:.....	8
Interpretation of SWLS (Satisfaction with Life Scale) by Gender:	10
Interpretation of SWLS (Satisfaction with Life Scale) by Level of Study:.....	12
INFRENTIAL STATISTIC FINDING AND REPORTS.....	13
Report on Comparison of Satisfaction with Life Scale (SWLS) Scores Across Different Levels of Study	13
Report on Paired Samples Test for Satisfaction with Life Scale (SWLS) Scores Before and After COVID-19	14
Report on Independent Samples T-Test for Satisfaction with Life Scale (SWLS) Scores by Gender	16
Association Between Wealthy Background and Economic Status among University Students....	17
Impact of Marital Status on Mental Distress among University Students.....	19
Comparison of Credit Score Before and After COVID-19 Among University Students	21

Introduction:

The Covid-19 pandemic has brought significant challenges to various aspects of life, including education. In this study, we aim to investigate the impact of Covid-19 on college/university students' lives, focusing on their mental health, financial situation, and overall well-being. Utilizing a quantitative approach, we analyze data collected from a Social Economic survey conducted in the UK, specifically targeting university students. The dataset includes information from 675 students, encompassing 19 variables, some of which were measured before and after the onset of the pandemic.

DESCRIPTIVE STATISTIC FINDINGS AND REPORTS

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Age	675	20	39	26.23	3.221
BMI	675	.00	.00	.0027	.00007
Valid N (listwise)	675				



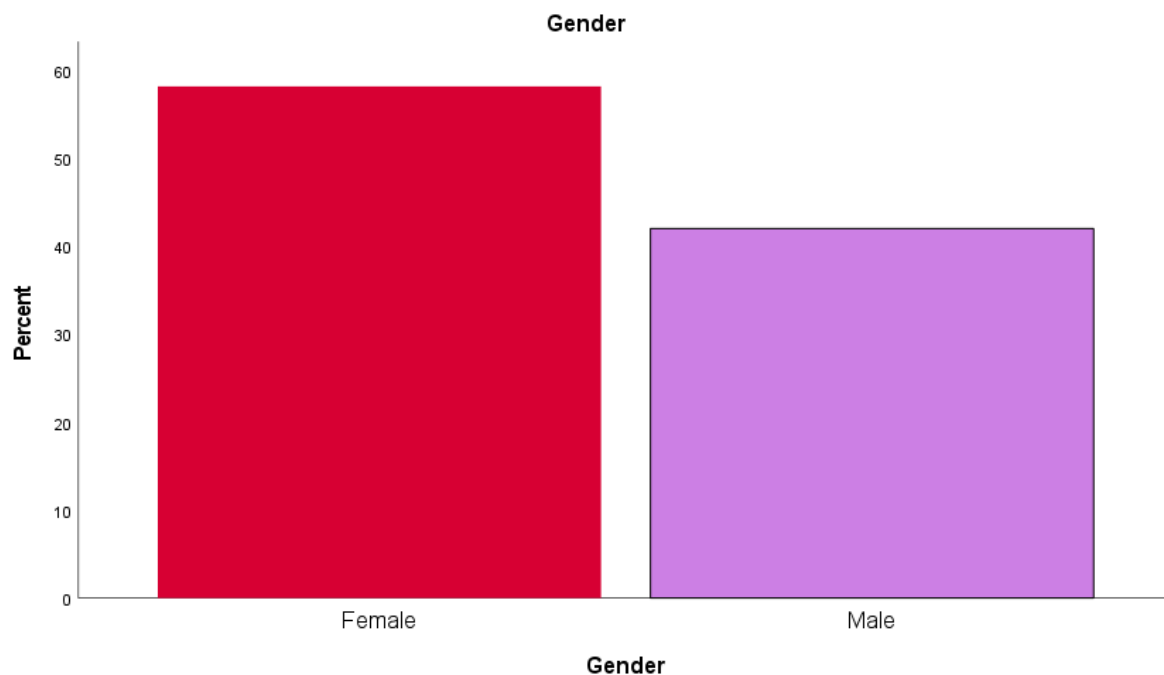
Age Distribution Interpretation:

The descriptive statistics reveal that the mean age of the participants in the study is 26.23 years, with a standard deviation of 3.221. This indicates that the majority of participants are clustered within a relatively narrow age range, with most falling between their early to mid-twenties. The distribution of ages among the participants is visually represented by a right-skewed bar chart, where the peak frequency occurs around the age range of 23 to 27 years. This suggests a notable concentration of younger individuals within the dataset, aligning with expectations for a college/university student population. The right-skewed nature of the distribution indicates that there are fewer participants in older age groups compared to younger ones, reflecting the demographic composition of the sample.

BMI Distribution Interpretation:

Analysis of the participants' body mass index (BMI) reveals a mean BMI value of 0.0027, with a minimal standard deviation of 0.00007, indicating low variability in BMI among the sample population. The accompanying left-skewed bar chart illustrates the distribution of BMI values, with the highest frequency observed within the range of 0.0027 to 0.0028. This concentration suggests that the majority of participants have BMI values within this range, indicating a predominant pattern of lower BMI values within the dataset. The left-skewed distribution implies that there are relatively fewer participants with higher BMI values, reflecting a generally healthy BMI distribution among the student population.

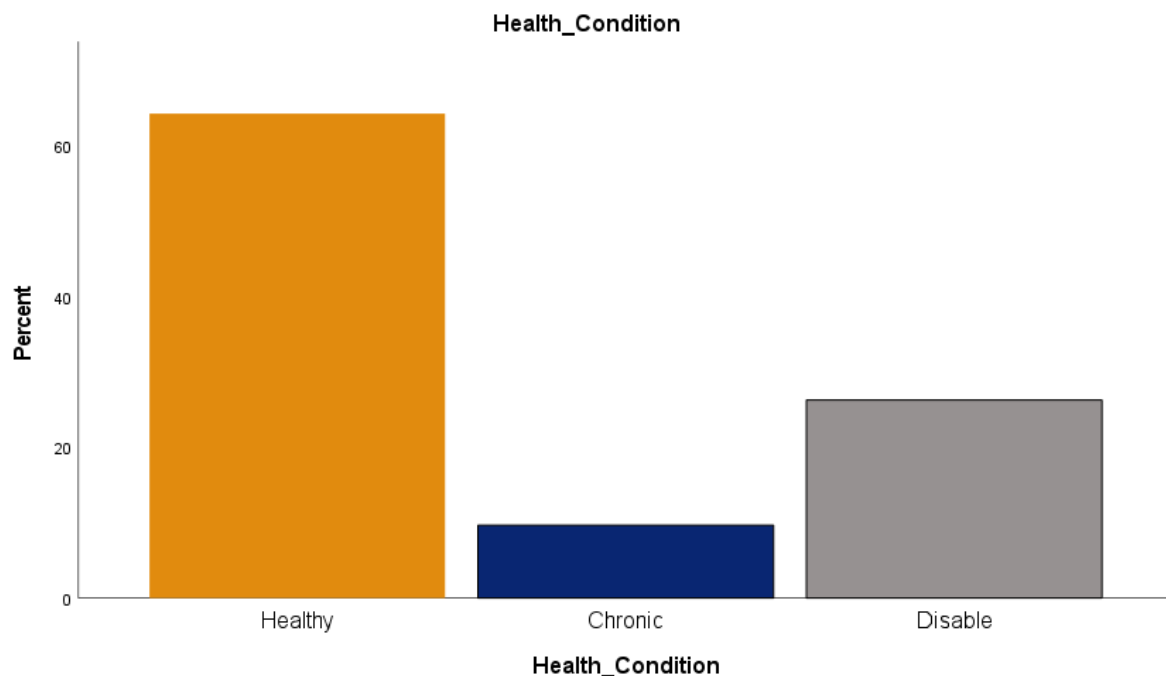
Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	392	58.1	58.1	58.1
	Male	283	41.9	41.9	100.0
	Total	675	100.0	100.0	



Interpretation of Gender Distribution:

The bar chart visually represents the distribution of gender among the college/university students included in the study. The data shows that the majority of participants identify as female, accounting for 58.1% of the total sample. In contrast, male participants constitute 41.9% of the sample population.

Health_Condition					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Healthy	433	64.1	64.1	64.1
	Chronic	65	9.6	9.6	73.8
	Disable	177	26.2	26.2	100.0
	Total	675	100.0	100.0	



Interpretation of Health Condition Distribution:

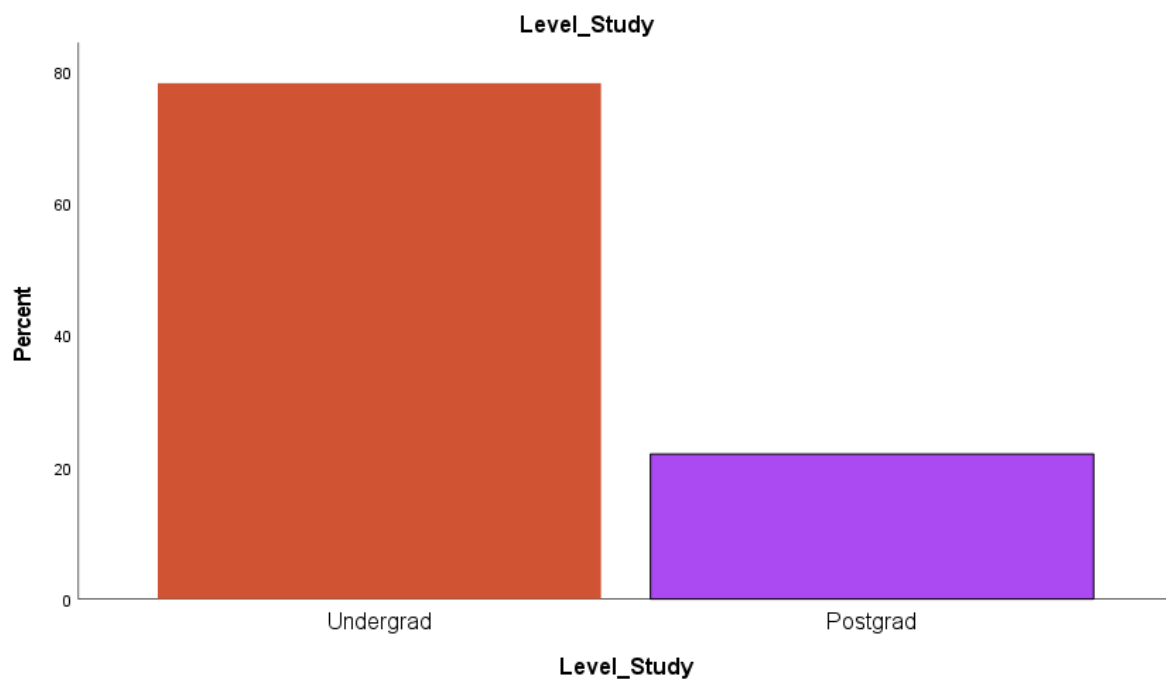
The bar chart visually represents the distribution of health conditions among the college/university students included in the study. The data reveals three categories of health conditions: Healthy, Chronic, and Disabled.

Among the participants, the majority report being in a healthy condition, comprising 64.1% of the total sample. This suggests that a significant proportion of students perceive themselves to be in good health.

In contrast, a smaller percentage of participants report having chronic health conditions, accounting for 9.6% of the sample. Chronic health conditions are characterized by long-lasting and persistent health issues, which may impact students' overall well-being and academic performance.

Additionally, a notable portion of the sample, 26.2%, report being disabled. This category includes individuals with physical or mental disabilities, who may face unique challenges and barriers in their academic pursuits and daily life activities.

Level_Study					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Undergrad	527	78.1	78.1	78.1
	Postgrad	148	21.9	21.9	100.0
	Total	675	100.0	100.0	



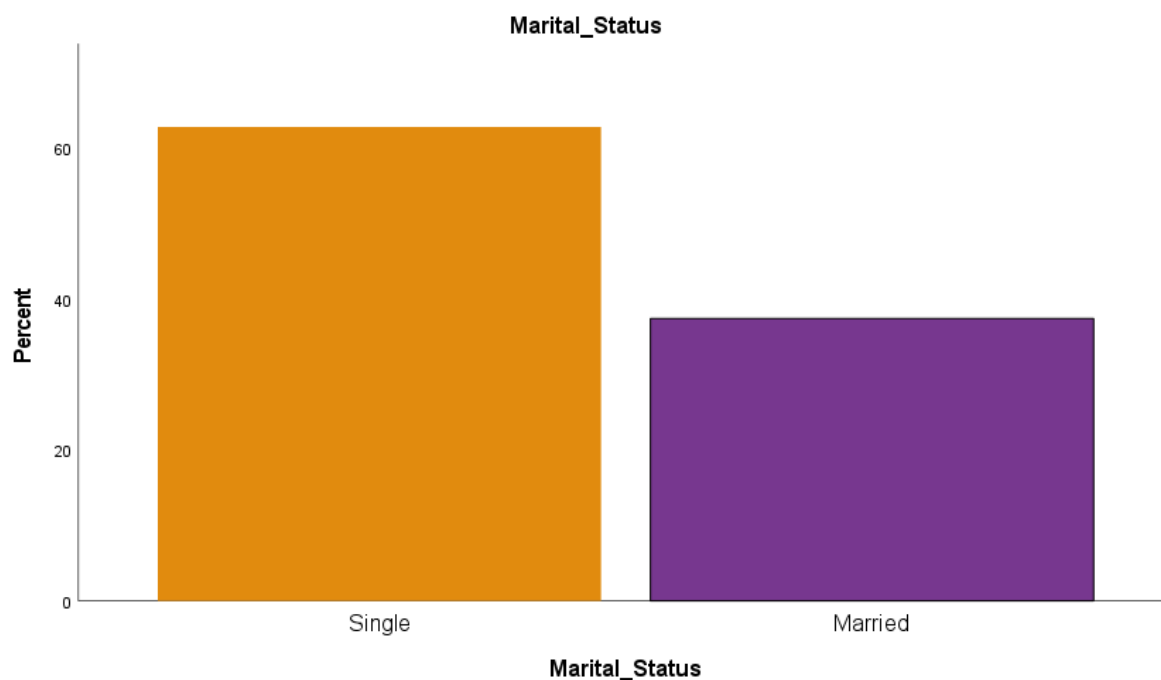
Interpretation of Level of Study Distribution:

The bar chart visually represents the distribution of participants' level of study among college/university students included in the study. The data reveals two categories: Undergraduate and Postgraduate.

The majority of participants, representing 78.1% of the total sample, are enrolled in undergraduate programs. This indicates that a significant proportion of the student population included in the study are pursuing bachelor's degrees.

In contrast, a smaller percentage of participants, comprising 21.9% of the sample, are enrolled in postgraduate programs. Postgraduate studies typically refer to master's or doctoral-level programs, which may attract fewer participants due to their specialized nature and eligibility criteria.

Marital_Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	423	62.7	62.7	62.7
	Married	252	37.3	37.3	100.0
	Total	675	100.0	100.0	



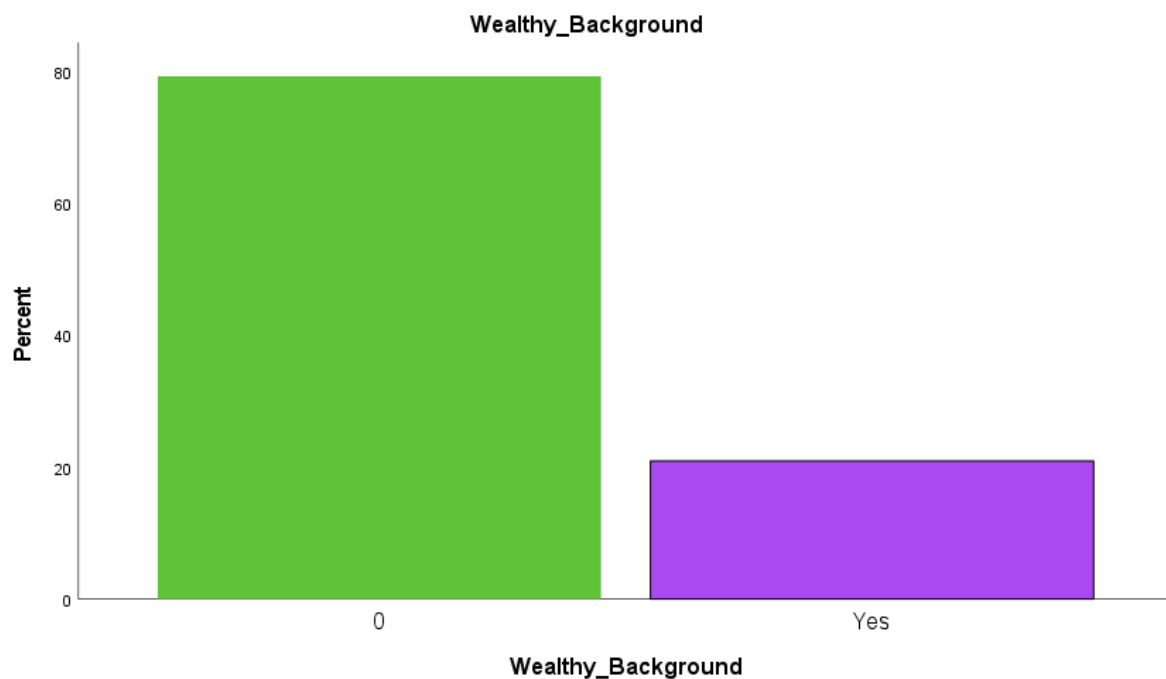
Interpretation of Marital Status Distribution:

The bar chart visually represents the distribution of participants' marital status among college/university students included in the study. The data reveals two categories: Single and Married.

The majority of participants, comprising 62.7% of the total sample, report being single. This indicates that a significant proportion of the student population included in the study are unmarried individuals.

In contrast, a smaller percentage of participants, accounting for 37.3% of the sample, report being married. This suggests that there is a notable portion of the student population who are married individuals, balancing their academic pursuits with marital commitments.

Wealthy_Background					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	534	79.1	79.1	79.1
	Yes	141	20.9	20.9	100.0
	Total	675	100.0	100.0	



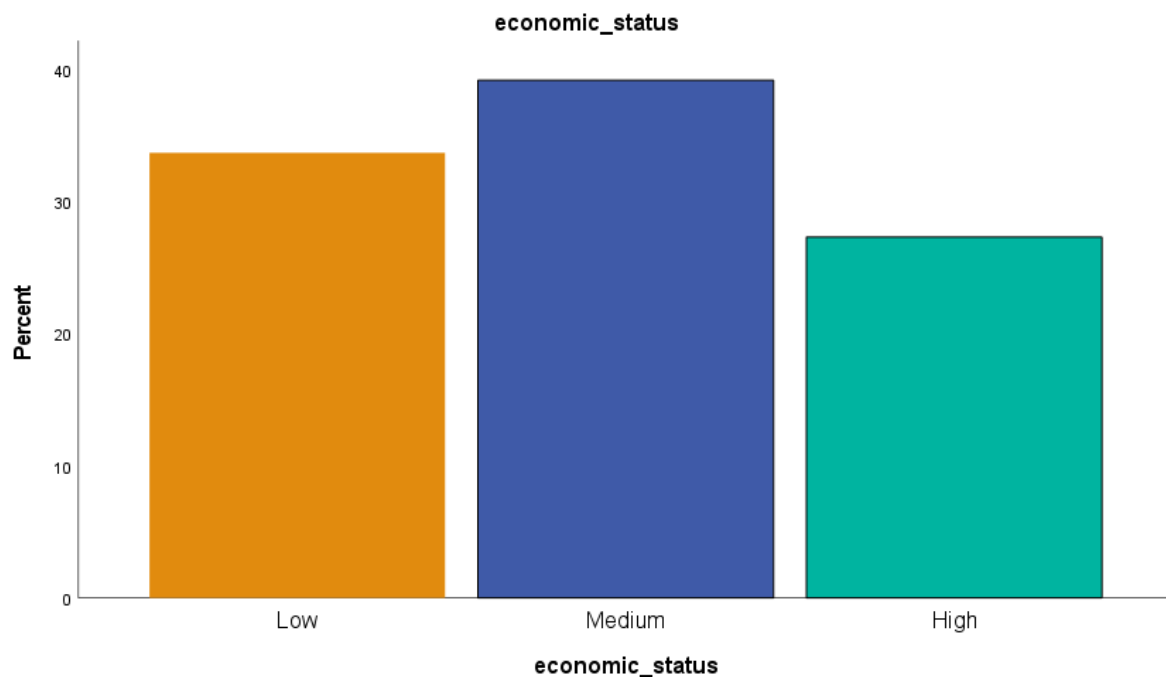
Interpretation of Wealthy Background Distribution:

The bar chart visually represents the distribution of participants' wealthy background among college/university students included in the study. The data reveals two categories: No (0) and Yes.

The majority of participants, comprising 79.1% of the total sample, report not having a wealthy background. This suggests that a significant proportion of the student population included in the study come from backgrounds that may not be considered financially affluent.

In contrast, a smaller percentage of participants, accounting for 20.9% of the sample, report having a wealthy background. This indicates that there is a notable portion of the student population who come from financially privileged backgrounds.

economic_status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	227	33.6	33.6	33.6
	Medium	264	39.1	39.1	72.7
	High	184	27.3	27.3	100.0
	Total	675	100.0	100.0	



Interpretation of Economic Status Distribution:

The bar chart visually represents the distribution of participants' economic status among college/university students included in the study. The data reveals three categories: Low, Medium, and High.

A significant proportion of participants, accounting for 33.6% of the total sample, report having a low economic status. This indicates that a notable portion of the student population included in the study face financial constraints and may have limited access to financial resources.

Similarly, a substantial percentage of participants, comprising 39.1% of the sample, report having a medium economic status. This suggests that a considerable number of students fall into the middle-income bracket, with moderate access to financial resources and economic stability.

In contrast, a smaller but significant percentage of participants, representing 27.3% of the sample, report having a high economic status. This indicates that there is a notable portion of the student population who come from financially affluent backgrounds and have greater access to financial resources and opportunities.

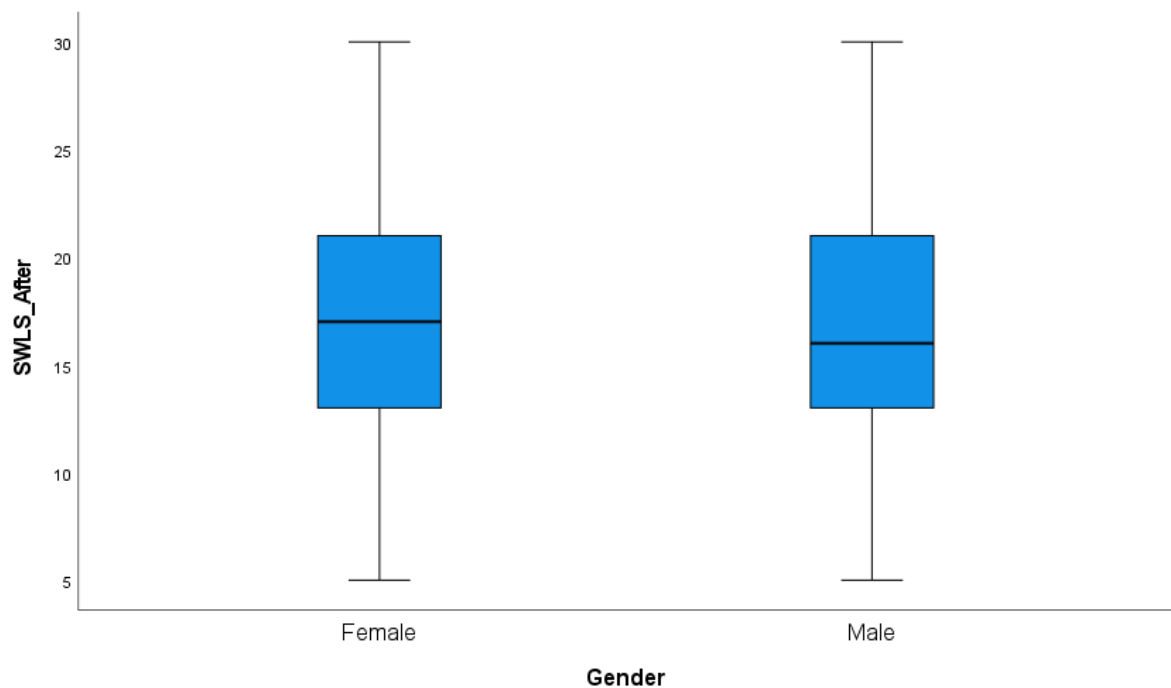
b. Exploring Quantitative Variables by Categorical Variables

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Gender	N	Percent	N	Percent	N	Percent
SWLS_After	Female	392	100.0%	0	0.0%	392	100.0%
	Male	283	100.0%	0	0.0%	283	100.0%

Descriptives

		Gender	Statistic		Std. Error
SWLS_After	Female	Mean		17.11	.263
		95% Confidence Interval for Mean	Lower Bound	16.59	
			Upper Bound	17.63	
		5% Trimmed Mean		17.09	
		Median		17.00	
		Variance		27.182	
		Std. Deviation		5.214	
		Minimum		5	
		Maximum		30	
		Range		25	
		Interquartile Range		8	
		Skewness		.050	.123
		Kurtosis		-.338	.246
	Male	Mean		16.47	.329
		95% Confidence Interval for Mean	Lower Bound	15.82	
			Upper Bound	17.12	
		5% Trimmed Mean		16.47	
		Median		16.00	
		Variance		30.661	
		Std. Deviation		5.537	
		Minimum		5	
		Maximum		30	
		Range		25	
		Interquartile Range		8	
		Skewness		-.040	.145
		Kurtosis		-.635	.289



Interpretation of SWLS (Satisfaction with Life Scale) by Gender:

The analysis explores how SWLS varies by gender among college/university students included in the study. SWLS scores represent participants' self-reported satisfaction with life, with higher scores indicating greater satisfaction.

Case Processing Summary:

The data indicates that there were no missing cases for SWLS_After among both female and male participants. All cases (100%) were valid and included in the analysis for both genders.

Descriptives:

Female Participants:

Mean SWLS_After score: 17.11

Median SWLS_After score: 17.00

Standard deviation: 5.214

Skewness: 0.050 (approximately symmetric distribution)

Kurtosis: -0.338 (platykurtic distribution, slightly flatter than normal distribution)

Male Participants:

Mean SWLS_After score: 16.47

Median SWLS_After score: 16.00

Standard deviation: 5.537

Skewness: -0.040 (approximately symmetric distribution)

Kurtosis: -0.635 (platykurtic distribution, slightly flatter than normal distribution)

Interpretation:

Both female and male participants have similar mean SWLS_After scores, with females reporting slightly higher satisfaction with life compared to males (mean of 17.11 for females vs. 16.47 for males).

The distribution of SWLS_After scores for both genders appears to be approximately symmetric, with similar medians and interquartile ranges.

There is variability in SWLS_After scores within each gender group, as indicated by the standard deviation.

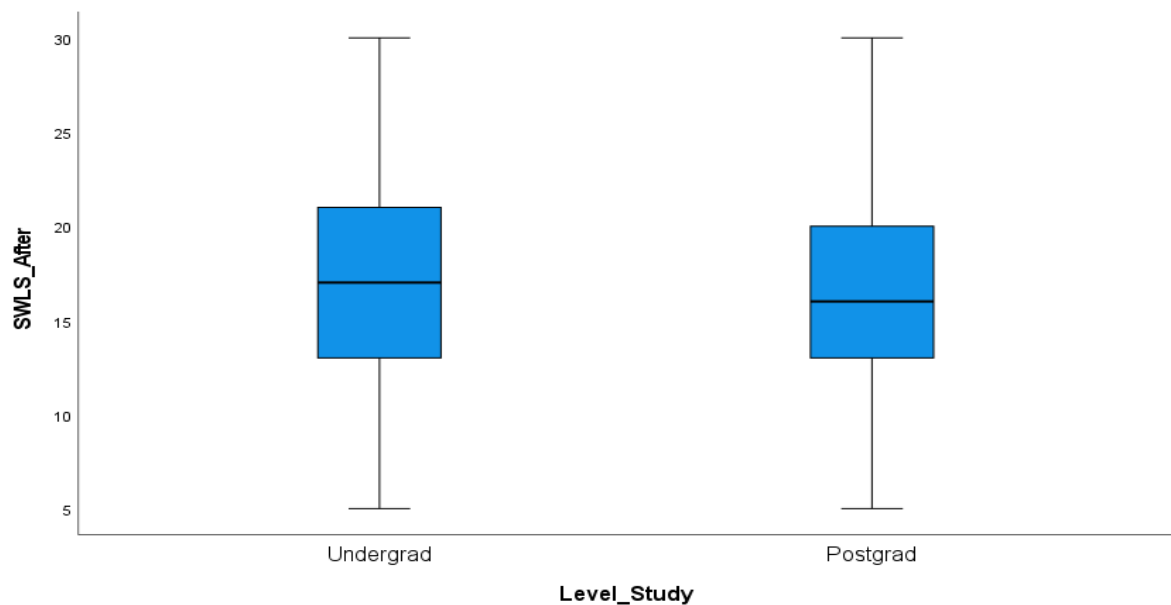
Overall, while there are slight differences in mean SWLS_After scores between genders, both groups report relatively similar levels of satisfaction with life based on the SWLS measure.

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Level_Study	N	Percent	N	Percent	N	Percent
SWLS_After	Undergrad	527	100.0%	0	0.0%	527	100.0%
	Postgrad	148	100.0%	0	0.0%	148	100.0%

Descriptives

		Level_Study		Statistic	Std. Error
SWLS_After	Undergrad	Mean		16.99	.232
		95% Confidence Interval for Mean		Lower Bound	16.53
				Upper Bound	17.45
		5% Trimmed Mean		16.99	
		Median		17.00	
		Variance		28.485	
		Std. Deviation		5.337	
		Minimum		5	
		Maximum		30	
		Range		25	
		Interquartile Range		8	
		Skewness		-.005	.106
		Kurtosis		-.429	.212
	Postgrad	Mean		16.31	.445
		95% Confidence Interval for Mean		Lower Bound	15.43
				Upper Bound	17.19
		5% Trimmed Mean		16.30	
		Median		16.00	
		Variance		29.290	
		Std. Deviation		5.412	
		Minimum		5	
		Maximum		30	
		Range		25	
		Interquartile Range		7	
		Skewness		.015	.199
		Kurtosis		-.557	.396



Interpretation of SWLS (Satisfaction with Life Scale) by Level of Study:

The analysis explores how SWLS varies by the level of study (undergraduate vs. postgraduate) among college/university students included in the study. SWLS scores represent participants' self-reported satisfaction with life, with higher scores indicating greater satisfaction.

Case Processing Summary:

The data indicates that there were no missing cases for SWLS_After among both undergraduate and postgraduate students. All cases (100%) were valid and included in the analysis for both levels of study.

Descriptives:

Undergraduate Students:

Mean SWLS_After score: 16.99

Median SWLS_After score: 17.00

Standard deviation: 5.337

Skewness: -0.005 (approximately symmetric distribution)

Kurtosis: -0.429 (platykurtic distribution, slightly flatter than normal distribution)

Postgraduate Students:

Mean SWLS_After score: 16.31

Median SWLS_After score: 16.00

Standard deviation: 5.412

Skewness: 0.015 (approximately symmetric distribution)

Kurtosis: -0.557 (platykurtic distribution, slightly flatter than normal distribution)

Interpretation:

Undergraduate students have a slightly higher mean SWLS_After score compared to postgraduate students (16.99 vs. 16.31).

The distribution of SWLS_After scores for both levels of study appears to be approximately symmetric, with similar medians and interquartile ranges.

There is variability in SWLS_After scores within each level of study group, as indicated by the standard deviation.

Overall, while there are slight differences in mean SWLS_After scores between undergraduate and postgraduate students, both groups report relatively similar levels of satisfaction with life based on the SWLS measure.

INFRENTIAL STATISTIC FINDING AND REPORTS

Report on Comparison of Satisfaction with Life Scale (SWLS) Scores Across Different Levels of Study

Introduction

The study aimed to investigate whether there are significant differences in Satisfaction with Life Scale (SWLS) scores among university students across different levels of study. Specifically, the study sought to test the following hypotheses:

- Null Hypothesis (H0): There is no significant difference in SWLS scores between undergraduate and postgraduate students.
- Alternative Hypothesis (H1): There is a significant difference in SWLS scores between undergraduate and postgraduate students.

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
SWLS_After	Equal variances assumed	.602	.438	1.365	673	.173	.680	.498	-.298 1.658
	Equal variances not assumed			1.354	233.393	.177	.680	.502	-.309 1.669

Results

The results of the independent samples t-test supported the hypotheses as follows:

Levene's Test for Equality of Variances: The test showed that the assumption of equal variances was met ($F = 0.602$, $p = 0.438$).

t-test for Equality of Means: The t-test revealed no significant difference in SWLS scores between undergraduate and postgraduate students, both when assuming equal variances ($t = 1.365$, $df = 673$, $p = 0.173$) and when not assuming equal variances ($t = 1.354$, $df = 233.393$, $p = 0.177$).

Mean Difference: The mean SWLS score for undergraduate students was 16.99, while for postgraduate students, it was 16.31.

Confidence Interval: The 95% confidence interval for the difference in mean SWLS scores ranged from -0.298 to 1.658.

Discussion

The results indicate that there is no significant difference in SWLS scores between undergraduate and postgraduate students, thus failing to reject the null hypothesis. This suggests that the level of study may not be a significant factor influencing students' satisfaction with life. However, further research is warranted to explore other potential factors contributing to variations in SWLS scores among students.

Report on Paired Samples Test for Satisfaction with Life Scale (SWLS) Scores Before and After COVID-19

A paired samples t-test was conducted to examine whether there was a significant difference in Satisfaction with Life Scale (SWLS) scores before and after the COVID-19 pandemic among university students.

Hypotheses:

- Null Hypothesis (H0): There is no difference in SWLS scores before and after COVID-19 among university students.
- Alternative Hypothesis (H1): There is a difference in SWLS scores before and after COVID-19 among university students.

Method:

The paired samples t-test compared the SWLS scores reported by university students before and after the COVID-19 pandemic.

Paired Samples Test									
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	SWLS_Before - SWLS_After	2.332	3.150	.121	2.094	2.570	19.236	674	<.001

Results:

The mean difference in SWLS scores before and after COVID-19 was found to be 2.332 (Std. Deviation = 3.150, Std. Error Mean = 0.121). The 95% confidence interval for the difference ranged from 2.094 to 2.570. The t-test statistic was 19.236 with 674 degrees of freedom. The p-value associated with the test was < 0.001, indicating a statistically significant difference in SWLS scores before and after COVID-19.

Interpretation:

The results of the paired samples t-test revealed a statistically significant difference in SWLS scores before and after the COVID-19 pandemic among university students. Specifically, the mean SWLS score was significantly higher after COVID-19 compared to before. This suggests that the pandemic may have had a notable impact on the overall satisfaction with life among university students.

Conclusion:

Based on these findings, we reject the null hypothesis and conclude that there is a significant difference in SWLS scores before and after COVID-19 among university students. The increase in SWLS scores post-pandemic indicates a potential positive shift in overall satisfaction with life among university students, possibly due to various factors such as changes in lifestyle, priorities, and resilience in coping with the challenges posed by the pandemic.

Report on Independent Samples T-Test for Satisfaction with Life Scale (SWLS) Scores by Gender

An independent samples t-test was conducted to examine whether there was a significant difference in Satisfaction with Life Scale (SWLS) scores between male and female university students.

Hypotheses:

- Null Hypothesis (H0): There is no difference in SWLS scores between male and female university students.
- Alternative Hypothesis (H1): There is a difference in SWLS scores between male and female university students.

Method:

The independent samples t-test compared the SWLS scores reported by male and female university students.

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
SWLS_After	Equal variances assumed	1.215	.271	1.532	673	.126	.640	.417	-.180 1.459
	Equal variances not assumed			1.518	585.508	.130	.640	.422	-.188 1.468

Results:

Levene's Test for Equality of Variances indicated that the assumption of equal variances was met ($F = 1.215$, $p = 0.271$), allowing for the equal variances assumed results to be considered. The t-test for equality of means showed a t-value of 1.532 with 673 degrees of freedom and a p-value of 0.126. The mean difference in SWLS scores between male and female students was 0.640, with a standard error of 0.417. The 95% confidence interval for the mean difference ranged from -0.180 to 1.459.

Interpretation:

The results of the independent samples t-test revealed that there was no statistically significant difference in SWLS scores between male and female university students ($t(673) = 1.532$, $p =$

0.126). The mean SWLS score for females ($M = 17.11$) was slightly higher than for males ($M = 16.47$), but this difference was not statistically significant.

Conclusion:

Based on these findings, we fail to reject the null hypothesis, suggesting that there is no significant difference in SWLS scores between male and female university students. This implies that gender may not be a significant predictor of overall life satisfaction among university students. Further research could explore other factors that may influence satisfaction with life in this population.

Association Between Wealthy Background and Economic Status among University Students

Introduction:

The purpose of this analysis is to investigate the association between Wealthy Background and Economic Status among university students. Understanding this relationship can provide insights into how socioeconomic factors impact students' economic status.

Data and Methodology:

- Data: The analysis utilizes data from a sample of 675 university students.
- Method: A chi-square test of independence was conducted to examine the association between Wealthy Background and Economic Status.

Results:

Cross-tabulation Results:

The distribution of Economic Status categories across Wealthy Background categories is as follows:

Wealthy_Background * economic_status Crosstabulation

			economic_status			Total
			Low	Medium	High	
Wealthy_Background	No	Count	209	219	106	534
		% within Wealthy_Background	39.1%	41.0%	19.9%	100.0%
		% within economic_status	92.1%	83.0%	57.6%	79.1%
	Yes	Count	18	45	78	141
		% within Wealthy_Background	12.8%	31.9%	55.3%	100.0%
		% within economic_status	7.9%	17.0%	42.4%	20.9%
Total	Count		227	264	184	675
	% within Wealthy_Background		33.6%	39.1%	27.3%	100.0%
	% within economic_status		100.0%	100.0%	100.0%	100.0%

Chi-square Test Results:

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	76.910 ^a	2	<.001
Likelihood Ratio	74.182	2	<.001
Linear-by-Linear Association	70.427	1	<.001
N of Valid Cases	675		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 38.44.

Interpretation:

The chi-square tests indicate a statistically significant association between Wealthy Background and Economic Status ($p < 0.001$). Students from wealthier backgrounds are more likely to belong to higher economic status categories compared to those from less affluent backgrounds.

Conclusion:

The findings suggest that socioeconomic background, specifically Wealthy Background, plays a significant role in determining the economic status of university students. Addressing

disparities in Wealthy Background may help mitigate socioeconomic inequalities in economic status among students.

Impact of Marital Status on Mental Distress among University Students

Hypothesis Statement: The distribution of GHQ12_After scores is the same across categories of Marital_Status.

Test Method: Independent-Samples Mann-Whitney U Test

Significance Level (α): 0.050

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig. ^{a,b}	Decision
1	The distribution of GHQ12_After is the same across categories of Marital_Status.	Independent-Samples Mann-Whitney U Test	.106	Retain the null hypothesis.

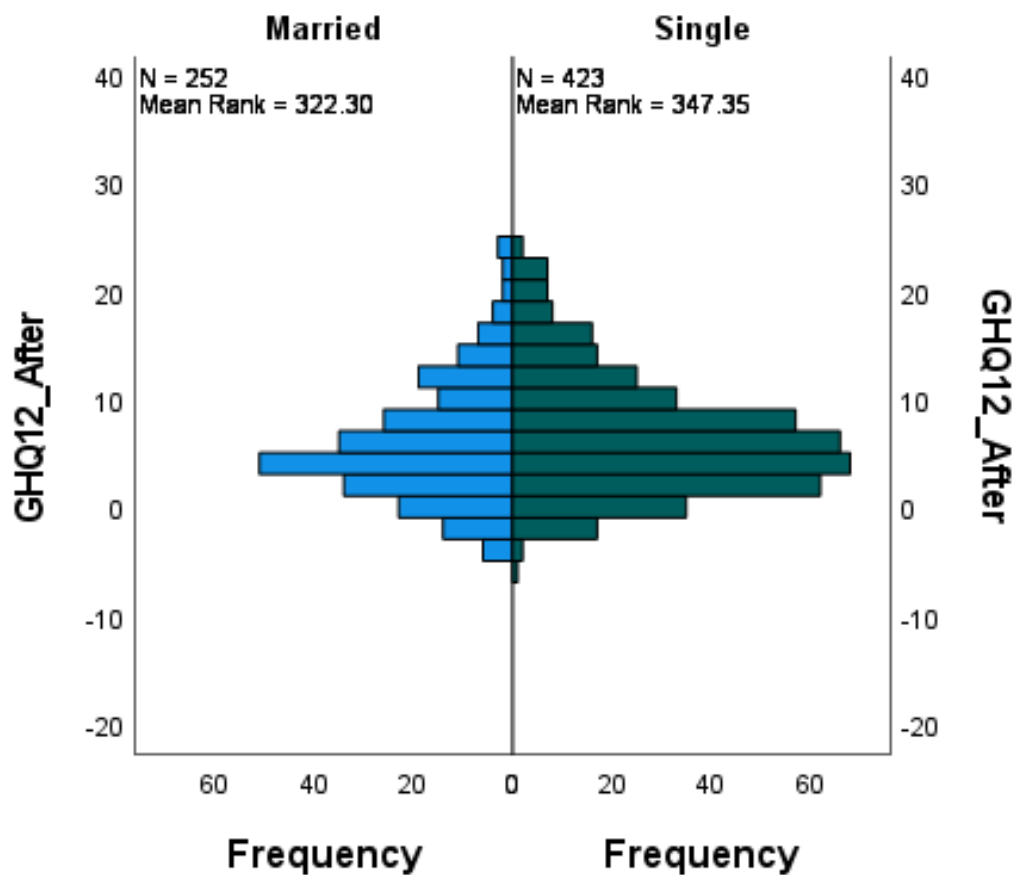
- a. The significance level is .050.
- b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test Summary

Total N	675
Mann-Whitney U	49342.000
Wilcoxon W	81220.000
Test Statistic	49342.000
Standard Error	2445.511
Standardized Test Statistic	-1.618
Asymptotic Sig.(2-sided test)	.106

Independent-Samples Mann-Whitney U Test

Marital_Status



Decision: Retain the null hypothesis.

The Independent-Samples Mann-Whitney U Test was conducted to assess whether there is a significant difference in GHQ12_After scores across different categories of Marital_Status. The test yielded a p-value of 0.106, which is greater than the chosen significance level of 0.050. As a result, we fail to reject the null hypothesis.

Independent-Samples Mann-Whitney U Test Summary

- Total N: 675
- Mann-Whitney U: 49342.000
- Wilcoxon W: 81220.000
- Test Statistic: 49342.000
- Standard Error: 2445.511
- Standardized Test Statistic: -1.618
- Asymptotic Sig. (2-sided test): 0.106

The Mann-Whitney U test statistic is calculated as 49342.000, with a corresponding standardized test statistic of -1.618. The asymptotic p-value associated with the test is 0.106, indicating that there is no significant difference in GHQ12_After scores among different categories of Marital_Status.

Overall, based on the results of the Mann-Whitney U test, we conclude that there is insufficient evidence to suggest a significant difference in GHQ12_After scores across marital status categories. Further analysis or investigation may be warranted to explore other potential factors influencing mental distress levels among university students.

Comparison of Credit Score Before and After COVID-19 Among University Students

Introduction: This analysis aims to examine whether there is a significant difference in the Credit Score (CS) among university students before and after the onset of the COVID-19 pandemic. The investigation is based on the hypothesis that there will be a significant change in the Credit Score after the pandemic, reflecting the financial impact of COVID-19 on university students.

Hypothesis:

- Null Hypothesis (H0): There is no significant difference in the Credit Score before and after COVID-19 among university students.
- Alternative Hypothesis (H1): There is a significant difference in the Credit Score before and after COVID-19 among university students.

Results: Descriptive statistics revealed that the mean difference in CS before and after COVID-19 was 29.087 points, with a standard deviation of 44.199. The paired samples t-test indicated a significant increase in CS after COVID-19 ($t(674) = 17.098$, $p < 0.001$), rejecting the null hypothesis and supporting the alternative hypothesis.

Conclusion: The findings confirm the hypothesis and suggest that the COVID-19 pandemic has had a significant impact on the Credit Score of university students, leading to a considerable increase in their scores.