Understanding UVU Students' Experiences

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INTRODUCTION

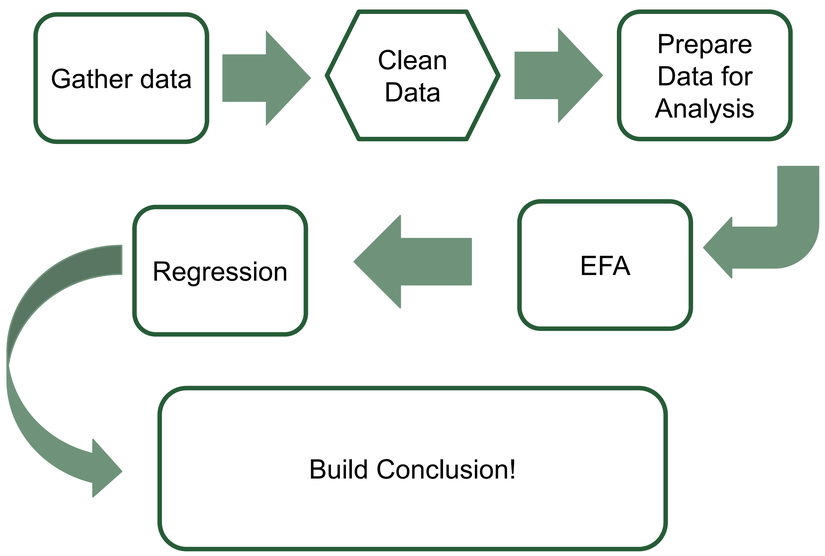
In 2019, researchers at Utah Valley University (UVU) interviewed 60 female students to discover their individual educational experiences and identities. Unlike universities across the nation, UVU has far more male students graduating than female students. The initial research was "to study female students' premature exit from Utah Valley University by examining UVU female students' intersections of identity, specifically how the lived realities of this population influence feelings and experiences of inclusion, success, motivation, and support within the broader context of UVU." [1]

In the interviews many of the respondents expressed the need for a college degree as a "backup plan" or "safety net" should an unforeseen circumstance arises in the future. As one respondent stated in their interview,

"I think the conversation in Utah is that a woman's education is optional and is not as required because you're not going to be the breadwinner." [2]

To try to quantify the experiences found in the interview round, researchers created a Qualtrics survey to analyze the relationship between students' self-esteem, spirituality, and loneliness; however, due to the COVID-19 pandemic the survey responses were not analyzed, and conclusions were not made. The aim of this project is to analyze approximately 250 responses gathered in the Fall of 2019 and compare them to approximately 400 responses in the Spring of 2023 (as a post-COVID comparison).

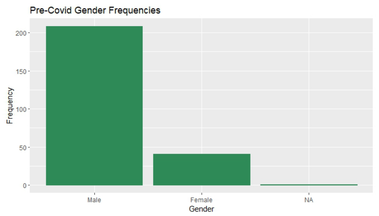
METHODS

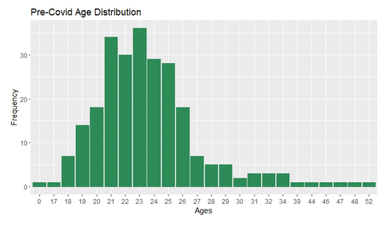


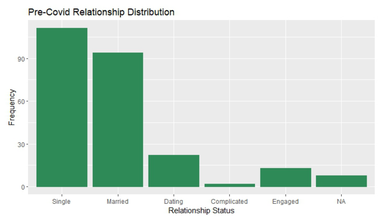
RESULTS/ DISCUSSION

DESCRIPTIVE STATISTICS

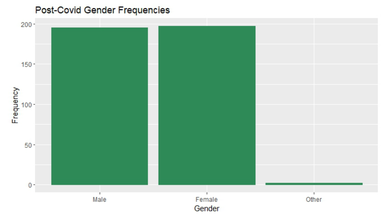
Pre-Covid

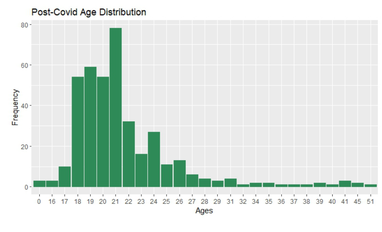


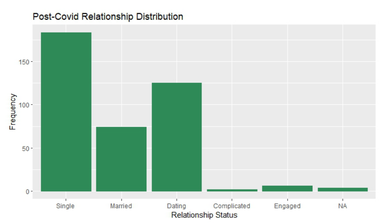




Post-Covid







EXPLORATORY FACTOR ANALYSIS

Self Esteem Factor Loadings

Pattern Matrix[a]

	Component		
	1	2	3
Q20_SelfEsteem	.863		
Q19_SelfEsteem	.823		
Q18_SelfEsteem		-.851	
Q16_SelfEsteem		-.861	
Q17_SelfEsteem	.752		
Q27_SelfEsteem	.506	-.330	
Q26_SelfEsteem		.752	
Q25_SelfEsteem		-.530	.465
Q24_SelfEsteem			.717
Q23_SelfEsteem	-.309		.671

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 12 iterations.

Structure Matrix

	Component		
	1	2	3
Q20_SelfEsteem	.859		
Q19_SelfEsteem	.837	-.305	
Q18_SelfEsteem	.381	-.859	
Q16_SelfEsteem	.382	-.866	
Q17_SelfEsteem	.780	-.339	
Q27_SelfEsteem	.616	-.543	.337
Q26_SelfEsteem	-.350	.792	
Q25_SelfEsteem		-.508	.548
Q24_SelfEsteem			.697
Q23_SelfEsteem			-.665

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

Loneliness Factor Loadings

Pattern Matrix[a]

	Component		
	1	2	3
Q37_Loneliness_1		.485	
Q38_Loneliness_1	.875		
Q41_Loneliness_1	.942		
Q40_Loneliness_1	.986		
Q39_Loneliness_1		.840	
Q43_Loneliness_1		.897	
Q42_Loneliness_1	.858		
Q44_Loneliness	.672		
Q45_Loneliness_1		.588	-.360
Q46_Loneliness_1		.689	
Q47_Loneliness_1	.786		
Q48_Loneliness_1	.857		
Q50_Loneliness_1	.703		
Q49_Loneliness_1	.865		
Q52_Loneliness_1	-.514		.309
Q51_Loneliness_1	-.379	.394	.488
Q53_Loneliness_1		-.352	.521
Q54_Loneliness_1	.617		
Q55_Loneliness_1	-.659		.337
Q56_Loneliness_1	-.669		.305

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 12 iterations.

Structure Matrix

	Component		
	1	2	3
Q37_Loneliness_1	-.619	.677	
Q38_Loneliness_1	.824	-.507	
Q41_Loneliness_1	.881	-.536	
Q40_Loneliness_1	.887	-.507	
Q39_Loneliness_1	-.516	.812	
Q43_Loneliness_1	-.507	.838	
Q42_Loneliness_1	.872	-.589	
Q44_Loneliness	.772	-.594	
Q45_Loneliness_1	-.550	.687	-.354
Q46_Loneliness_1	-.652	.819	
Q47_Loneliness_1	.815	-.562	
Q48_Loneliness_1	.828	-.522	
Q50_Loneliness_1	.782	-.591	
Q49_Loneliness_1	.896	-.621	
Q52_Loneliness_1	-.653	.560	.307
Q51_Loneliness_1	-.637	.653	.490
Q53_Loneliness_1	.533	-.541	.519
Q54_Loneliness_1	.759	-.624	
Q55_Loneliness_1	-.797	.655	.333
Q56_Loneliness_1	-.812	.669	.301

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

Spirituality Factor Loadings

Component Matrix[a]

	Component 1
Q21_Spirituality	.869
Q28_Spirituality	.928
Q31_Spirituality	.934
Q33_Spirituality	.941
Q34_Spirituality	.948
Q35_Spirituality	.938

Extraction Method: Principal Component Analysis.

REGRESSION

As of today, we have yet to find a regression model that best fits our data as we are experiencing a collinearity issue. We think that there is too much correlation between our predictors and response variable. Contrary to common statistics, we have tried fitting different models where different factors are the response variable.

In each model, we have noticed that our factors are significant in terms of predicting the response variable, and demonstrate relationship between, but the R^2, value we are observing close to zero, implying that each model does not explain the variability in the response variable. This result could be because of the high variability in our issue.

CONCLUSIONS

Ultimately, we have found that our scales do "hang together" and explain the variability of our issue. This was surprising because often EFA requires several iterations to develop factors that can be used for Regression. Our factor were developed without any data pruning, indicating that the scales and questions we have explain the issues we're analyzing.

The issue we are facing is that all our regression models seem to have significant predictors, but have low R^2 values, indicating that our factors have real relationships, but do not explain the variability of the data. This could be because the issue we are trying to explain is highly variable: young adults between 18-25 have changing views on their self esteem, spirituality, and their levels of loneliness.

Next steps for our research include a final paper write up, analyzing data further to explain regression (and see the same result occurs the pre-covid only data).

REFERENCES

- 1. Pauly, J. & Munz, S. "UVU Student Experiences," SEED Grant Application, awarded 2018.
- 2. Participant Interview

ACKNOWLEDGEMENTS

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