



# Scale validation of mental health outcomes in college students

Rex Beazer, Yuna Jensen, Neha Sharma, Richelle Castro, Sharon Su, Caileen Sylvester,  
Olivia Kalloo, Martin S. Lipsky, Frank W. Licari, Eric S. Hon, Man Hung

ROSEMAN UNIVERSITY  
COLLEGE OF PHARMACY

## INTRODUCTION

- Several scales have been developed to evaluate mental health outcomes associate with COVID-19 but none have been adequately validated.
- This project is the first validation of a scale measuring mental health outcomes related to COVID-19 in college students.

## METHODS

- This scale consists of 13 items measuring various aspects of mental health issues arising form COVID-19.
- It was administered to 145 dental students anonymously in 2020.
- The items were transformed to linear scale. Summary statistics, item and person reliabilities, dimensionality, item targeting, and item bias were assessed.

## DISCUSSION

- This scale showed excellent measurement properties.
- This scale will be very valuable for evaluating and tracking the effectiveness of intervention programs that aim to improve students' mental health outcomes related to COVID-19.

## ACKNOWLEDGEMENT

- This study was supported by the Clinical Outcomes Research and Education at Roseman University of Health Sciences College of Dental Medicine.

## RESULTS

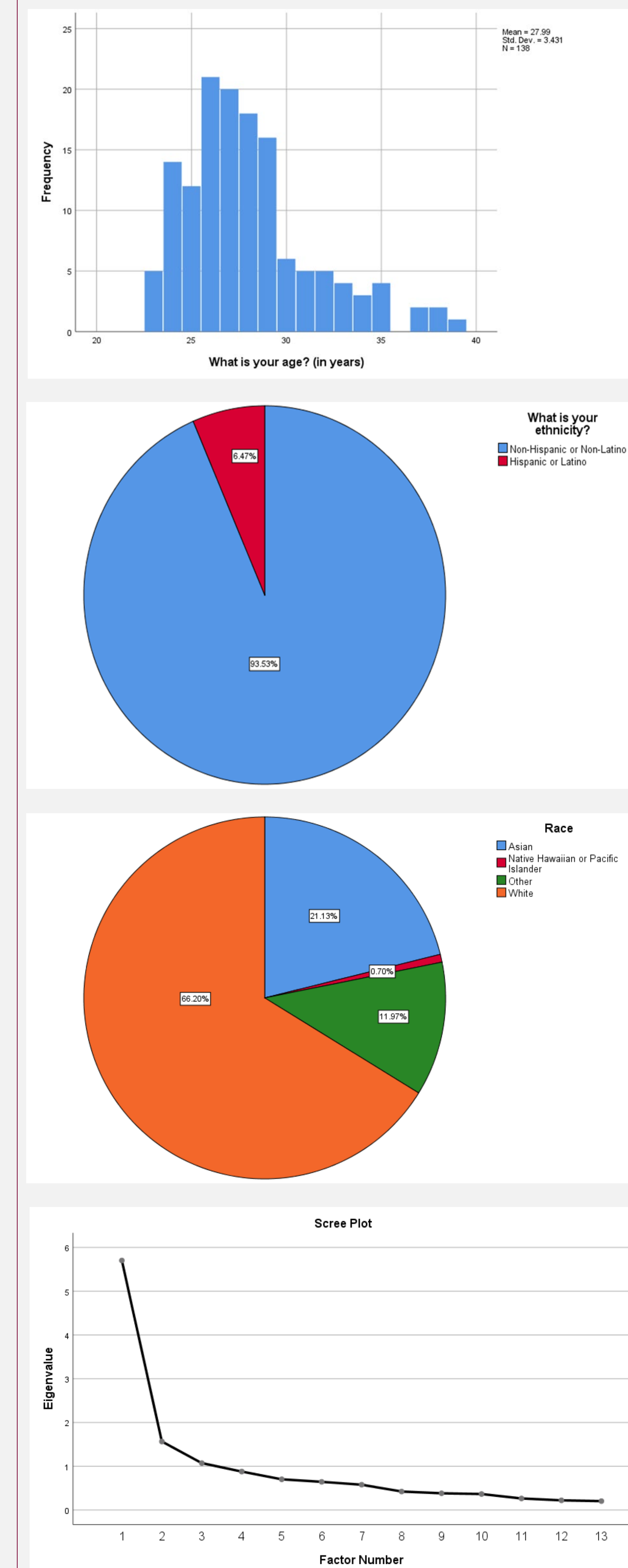


Figure 1:  
Avg. age is ~28 years  
Range = 23 to 39 years

Figure 2:  
Hispanic and Latino  
represented 6.47% of  
the study population.

Figure 3:  
Majority (66.20%)  
were White.

Figure 4:  
The scale is fairly  
unidimensional.

Person reliability = 0.88  
Item reliability = 0.97

## RESULTS

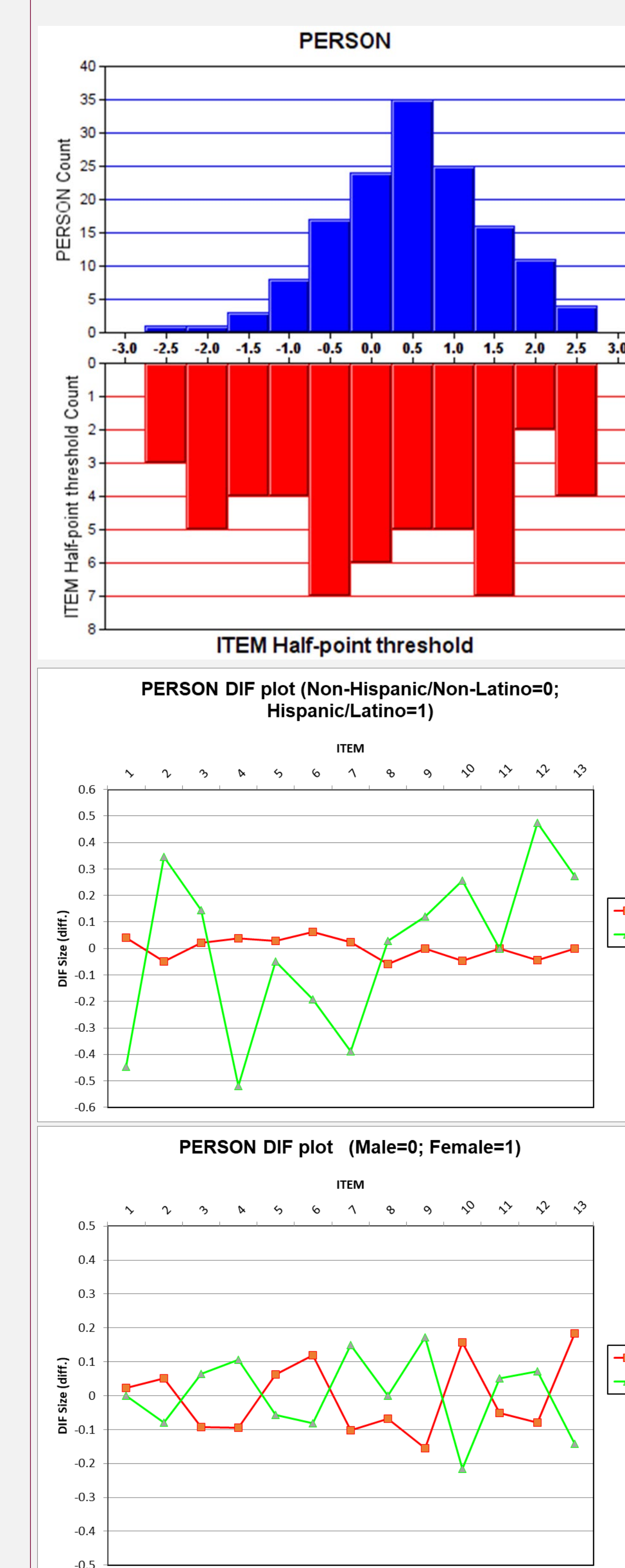


Figure 5:  
The scale captures a  
wide range of mental  
health outcomes and  
targets the sample  
population very well.

Figure 6:  
All items are free from  
ethnic bias.

Figure 7:  
All items are free from  
gender bias.