

# Digital Wellness Assignment 4

## PART A

For each of the 6 variables below, compute the Z scores. Find the mean, standard deviation, and variance for each raw score distribution and its corresponding Z distribution.

Check out the [guidance on decimal reporting](#) and round correctly!

### Question 1

3 pts

#### TOUCH

raw scores:

mean equals

standard deviation equals

variance equals

Z scores:

mean equals

standard deviation equals

variance equals

### Question 2

3 pts

#### PSS TOTAL

raw scores:

mean equals

standard deviation equals

variance equals

Z scores:

mean equals

standard deviation equals

variance equals

Question 3

3 pts

MICRO optimism

raw scores:

mean equals

standard deviation equals

variance equals

Z scores:

mean equals

standard deviation equals

variance equals

Question 4

3 pts

MACRO optimism

raw scores:

mean equals

standard deviation equals

variance equals

Z scores:

mean equals

standard deviation equals

variance equals

## Question 5

3 pts

## SCREEN TIME DAILY AVERAGE

raw scores:

mean equals standard deviation equals variance equals 

Z scores:

mean equals standard deviation equals variance equals 

## Question 6

3 pts

## MEAN VITALITY

raw scores:

mean equals standard deviation equals variance equals 

Z scores:

mean equals standard deviation equals variance equals 

## PART B BAR CHART OF FREQUENCIES

See page 2 of [assignment 4](#) for the instructions: which variables to graph and how to arrange them into a document.

## Question 7

14 pts

Upload your 6-page document here. This must be something we can open. The following formats we know work: pdf, doc, docx

Upload

⋮ OUTLIERS TOUCH

2 pts

Using the criteria that if Z is greater than (i.e. beyond)  $\pm 2.58$ , were there any outliers within the TOUCH variable? If yes identify the RANGE of score(s) that represent outliers in their raw score format. If none, write none.

⋮ OUTLIERS PSS TOTAL

2 pts

Using the criteria that if Z is greater than (i.e. beyond)  $\pm 2.58$ , were there any outliers within the PSS TOTAL variable? If yes identify the RANGE of score(s) that represent outliers in their raw score format. If none, write none.

⋮ OUTLIERS MICRO

2 pts

Using the criteria that if Z is greater than (i.e. beyond)  $\pm 2.58$ , were there any outliers within the MICRO optimism variable? If yes identify the RANGE of score(s) that represent outliers in their raw score format. If none, write none.

⋮ OUTLIERS MACRO

2 pts

Using the criteria that if Z is greater than (i.e. beyond)  $\pm 2.58$ , were there any outliers within the MACRO optimism variable? If yes identify the RANGE of score(s) that represent outliers in their raw score format. If none, write none.

⋮ OUTLIERS SCREEN TIME

2 pts

Using the criteria that if Z is greater than (i.e. beyond)  $\pm 2.58$ , were there any outliers within the SCREEN TIME variable? If yes identify the RANGE of score(s) that represent outliers in their raw score format. If none, write none.

⋮ OUTLIERS VITALITY

2 pts

Using the criteria that if Z is greater than (i.e. beyond)  $\pm 2.58$ , were there any outliers within the VITALITY variable? If yes identify the RANGE of score(s) that represent outliers in their raw score format. If none, write none.

⋮ RAW VS Z SCORES

For each of the 6 variables, compare the bar charts for the raw scores and Z scores. Hint – do not overthink. The next 3 questions are meant to be super easy!

⋮ SHAPE

2 pts

How does the shape of the raw score distributions and Z score distributions compare?

☰ Y-AXIS

2 pts

How do their **y-axis** compare?

☰ X-AXIS

2 pts

How do their **x-axis** compare?

☰ BONUS

**BONUS!** Copy and paste all relevant SPSS results tables into a single document (doc, docx, pdf). Hi-light those numbers you used in PART A of this assignment, and only those numbers. Upload this to Canvas under the quiz called "digital wellness assignment 4: bonus points". Do this correctly and earn **5 bonus points**.