

## Digital wellbeing from pre-COVID pandemic through endemic eras

If you haven't already, go to the stats lab website and take the wellbeing survey. If you would rather not, then in the very least, go to the website and click on the printable version of the survey and look through all the questions asked on the survey. Once you've done this – read on!

The Digital Wellbeing Survey asks many questions. Some of these questions are grouped together to measure a specific trait, attitude, or belief. **A grouping of questions designed to collectively measure a trait, attitude, or belief is called a “scale”.** Do not confuse this with “scale of measurement” (nominal, ordinal, interval, ratio) or what SPSS refers to as “scale” (which is interval or ratio).

The following scales are contained within the digital wellbeing survey:

**Perceived Social Support Scale**

**Screen Time Daily Average Scale**

**Micro Optimism Scale**

**Macro Optimism Scale**

**Perceived Vitality Scale**

**Suicidality Scale**

Over the course of the semester, we will answer the following questions about our data using statistics.

1. **Do males and females engage in different amounts of touch?** We will use a “t-test” to compare the mean touch score for men vs. women to see if they are “significantly” different.
2. **Do males and females differ in suicidality?** We will use a “t-test” to compare the mean suicidality score (SBQR) for men vs. women to see if they are “significantly” different.
3. **Has intimate touch changed from pre-pandemic to endemic times?** We will use a “one-way ANOVA” to compare the mean touch score for each of four time periods to see if any of the time periods are “significantly different” from each other.
4. **Do optimism scores differ according to the category of the concern (work, relationships, U.S., global world, planet: the IV)??** We will use a “one-way ANOVA” to compare the mean optimism score for each of these categories to see if any of the categories are “significantly different” from each other.
5. **Do sex and environment (micro vs macro), alone or in combination have any effect on optimism?** We will use a “two-way mixed ANOVA” to compare mean levels of optimism for males vs. females, and to compare the mean levels of optimism for the micro-environment vs for

the macro-environment. This test will also tell us whether levels of optimism for males vs females depend on whether we look at the micro-environment vs. the macro-environment. For example, will we find that optimism is different for males and females in the micro-environment, but not different in the macro-environment? Or maybe will we find that optimism for males and females is the same in the micro-environment, but different in the macro-environment?

6. Intimate touch will be described as low, medium, and high. Then we will use a “chi-square” test to see if the same number of participants fall into each category. In other words, we will answer the question: **does one category of touch contain more people than the other categories of touch?**
7. Screen time daily average will be described as low, medium, and high. Then we will use a “chi-square” test to answer the question: **is the percentage of males in each category of screen time the same as the percentage of females in each category of screen time?**
8. **Which variables are related to suicidality?** We will use “correlation” to see if there is a relationship between each of the following:

Touch and Suicidality

Perceived social support and Suicidality

Screen time daily average and Suicidality

Perceived vitality and Suicidality

Optimism in the micro-environment and Suicidality

Optimism in the macro-environment and Suicidality

9. **Which variables predict suicidality?** We will use “multiple regression” to see if any of the following variables predict suicidality and how strongly:

Touch, Perceived social support, Screen time daily average, Perceived vitality, Optimism in the micro-environment, and Optimism in the macro-environment.

Of course, there are many, many more questions we could ask and answer using statistics – but these ought to keep you busy enough!



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### The Different Scales Embedded with the Survey

#### Perceived Social Support Scale (PSS)

The “official” name for this scale is the **Interpersonal Support Evaluation List–Short Form, ISEL-12** developed by Cohen, Mermelstein, Kamarck, & Hoberman (1985). Answers to the following 12 questions are summed to get a total score:

1. If I wanted to go on a trip for a day (for example, to the country or mountains), I would have a hard time finding someone to go with me.
2. I feel that there is no one I can share my most private worries and fears with.
3. If I were sick, I could easily find someone to help me with my daily chores.
4. There is someone I can turn to for advice about handling problems with my family.
5. If I decide one afternoon that I would like to go to a movie that evening, I could easily find someone to go with me.
6. When I need suggestions on how to deal with a personal problem, I know someone I can turn to
7. I don't often get invited to do things with others.
8. If I had to go out of town for a few weeks, it would be difficult to find someone who would look after my house or apartment (the plants, pets, garden, etc.).
9. If I wanted to have lunch with someone, I could easily find someone to join me.
10. If I was stranded 10 miles from home, there is someone I could call who could come and get me.
11. If a family crisis arose, it would be difficult to find someone who could give me good advice about how to handle it.
12. If I needed some help in moving to a new house or apartment, I would have a hard time finding someone to help me.

#### Screen Time Daily Average Scale

This is one that I created to measure screen time. Participants are asked how many hours they spend looking at screens for each day of the week (Monday through Saturday) in two environments: a) work and school, b) not at work or school. The 14 numbers (7 days x 2 environments) are then averaged (using the mean) to get each participant’s “daily average screen time”.

### Micro Optimism Scale

This is one I created to measure optimism for your immediate (closest) environment. The following two questions make up this scale:

Looking ahead 5 years, how pessimistic or optimistic are you that each of the following has a bright, healthy future.

1. Your work/career and
2. Your relationships with friends/family

### Macro Optimism Scale

This is one I created to measure optimism for your more distant environment. The following three questions make up this scale:

Looking ahead 5 years, how pessimistic or optimistic are you that each of the following has a bright, healthy future.

1. The United States
2. People and countries all around the world
3. The physical planet Earth

### Perceived Vitality Scale (PVS)

This scale was developed by Ryan & Frederick in 1997. Answers to the following 6 questions are averaged using the mean, to get the mean PVS score

- I feel alive and vital
- Sometimes, I am so alive I just want to burst
- I have energy and spirit
- I look forward to each new day
- I nearly always feel awake and alert
- I feel energized

### Suicidality Scale (SBQR)

The true name of this scale is the **Suicide Behavior Questionnaire, Revised**. It was developed by Osman, 2001. Answers to the following 4 questions are added together to get the total SBQR total:

- Have you ever thought about or attempted to kill yourself?
- How often have you thought about killing yourself in the past year?
- Have you ever told someone that you were going to commit suicide, or that you might do it?
- How likely is it that you will attempt suicide someday

**Each of these scales yields a score for each participant. The scores are considered to be interval (for some) and ratio (for others).** SPSS doesn't care which are interval vs ratio. SPSS calls these scores "scale" – which means interval or ratio.