BIO 7A Media: Mini-stress Study

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Procedure:

For my stress study I decided to evaluate my stress level based on the results from various online "stress questionnaires" claiming to provide a manner of measuring perceived stress levels.

For each survey I tried quantitatively measuring the thoroughness of a survey compared to the severity of stress received according to that survey:

- 1. **Thoroughness of Survey** (1-10, 1 being very few questions, 10 being a wide variety of questions with a decent depth and specificity)
- 2. **Stress Rating from the Survey** (1-10, 1 being not stressed at all, 10 completely stressed, 5 being a 'regular' amount of stress)

For my experiment I tried selecting a variety of surveys from sources that appeared somewhat self-serious. Here's a quick list of the questionnaires I took:

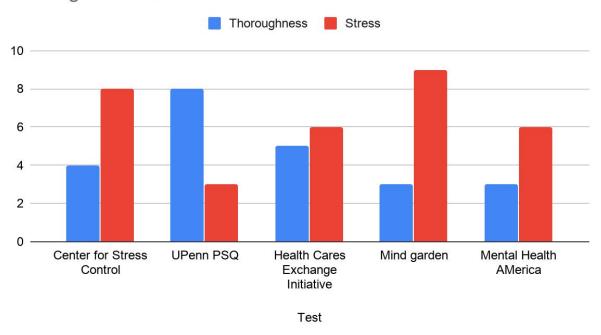
- 1. The "center for stress controls" s online questionnaire: http://www.centerstresscontrol.com/en/workplace-stress/stress-questionnaire/
- Perceived Stress Questionnaire from the University of Pennsylvania's medical school: https://www.med.upenn.edu/cbti/assets/user-content/documents/Perceived%20Stress%20Questionnaire%20(PSQ).pdf
- 3. The ISMA's (organization in UK) questionnaire: http://www.hcei.org/uploads/5/2/4/3/52438643/stress-questionnaire.pdf
- 4. Mindgarden's questionnaire: https://www.mindgarden.com/documents/PerceivedStressScale.pdf
- Mental Health America's questionnaire https://www.mhanational.org/get-involved/stress-screener

Why I chose questionnaires:

I decided to opt for using surveys both because I found it to be a convenient way of attempting to measure my stress level and because I am not confident in my ability to measure other variables relating to stress (e.g. heart rate).

Results:

Thoroughness and Stress



My average stress rating was 6.4 with a range of 6, which would be slightly above the 'regular' level of stress in my generic standardized scale.

Comparatively, the average thoroughness of a survey was only 4.6, which indicates that I found most surveys to be insufficiently comprehensive.

A side-effect of my cynicism towards most questionnaires is that in general, my recorded level of stress exceeded the perceived comprehensiveness of a given survey. The only exception being the survey I found on the University of Pennsylvania's website which had 30 questions (the most of any survey) each relating to a comparatively diverse set of circumstances. Interestingly enough, the most comprehensive survey gave me the smallest perceived stress rating.

Assuming that the average stress rating is a true measure of my perceived stress, I have a slightly abnormally high amount of stress. This makes sense given that I am currently nearing the end of a term, meaning most classes increase in difficulty in addition to having a global pandemic continue on for the past few months.

Personal perception of each site's credibility:

I used a variety of questionnaires from various sources but they all typically operated in the same fashion. They make a series of statements then ask to which degree I identified with the statement generally one a 1-4 scale. The scoring would be tally of all my responses (along with

a reverse scoring for a few questions, e.g. 4 would be a 0 and vice-versa). While there will obviously be issues in attempting to diagnose or "measure" one's stress levels via a questionnaire, what I found most egregious about the questionnaires was the actual quality of questions.

Effectively most of these questionnaires would ask an effective euphemism for "are you stressed?". For instance, the mind garden stress scale questionnaire asks, "*In the last month, how often have you felt nervous and "stressed"*? Which effectively makes the whole purpose of a perceived stress questionnaire redundant if I am going to self-diagnose my stress-level anyway.

Another more major issue with these questionnaires is that the scoring metrics for most of these questionnaires are needlessly complex and oftentimes undecipherable. For instance the many questionnaires needlessly decide to have random questions scored on an inverse scale rather than just have a standard metric to determine the score for each question. Additionally, sometimes it's hard to know what to do with a score since there won't be a clear categorization indicating what an average score might be (for instance the Parelman School of Medicine's questionnaire only mentioned that scores in a range of 0.90-0.92 correlated and provided no other metrics for determining whether or not a score indicated a 'normal' or 'average' level of stress).

Conclusion:

While convenient, I found questionnaires attempting to diagnose stress, in general, lack a sufficient set of questions to adequately measure one's perceived stress level. While it might be difficult to create a set of questions which work for a wide variety of people, questionnaire authors should strive to be more specific and detailed in the types of questions they ask and provide more straightforward methods of calculating and observing results.