

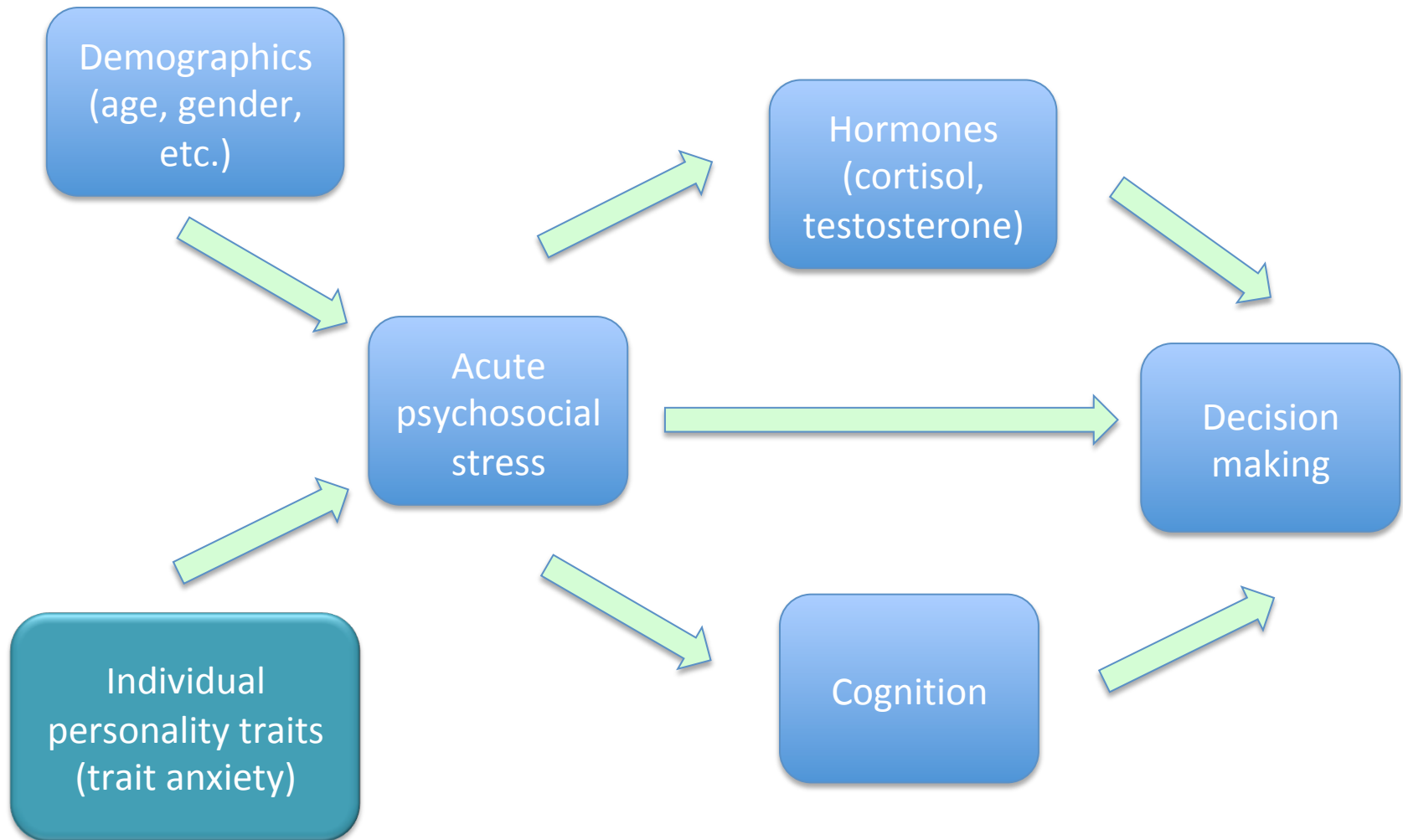
A digital survey investigation of the stability of the Trait Anxiety Inventory in the UChicago community

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Background



Research Question

- In psychology research, to measure stable traits of personality and individual differences, we use questionnaire / survey data.
- In my study, to save money/time, some of these trait questionnaires are taken outside of the lab.
- RQ: How stable is the Trait Anxiety Inventory in my dissertation research population; specifically, does setting, time of day, and mood relate to trait anxiety responses of UChicago community members when the T.A.I. is taken outside of a controlled laboratory setting?

What do we know?

- The State-Trait Anxiety Inventory
 - Long standing, frequently used, sensitive, valid (Spielberger, 1989; Chapman & Cox, 1977)
 - Retest correlations show reliability (Spielberger et al, 1983)
- Long-term studies have examined the temporal and retest stability other types of trait questionnaires
- Benefits of online questionnaire vs. in person questionnaire (Murthy, 2008)

What don't we know?

- Bias of digital questionnaire
 - In person, have more environmental control
- Is the trait anxiety questionnaire susceptible to responses that may reflect state anxiety?
 - Extraneous effects of mood, time of day, and setting
- Stability of responses of specific UChicago undergrad population
 - Stressful environment

Model / Theory

- WEIRD population
- In person vs. digital survey distribution
- If the TAI measures trait anxiety as a stable trait, then trait anxiety scores should not be statistically significantly related to setting factors that are not stable, such as:
 - Time of day
 - Mood
 - Setting (where the survey was taken)

Methods

- Qualtrics survey (digitally-enhanced)
 - Administer the TAI
 - Administer post-survey questions:
 - Time of day
 - Setting
 - Mood
- Qualtrics
 - Software that enables users to collect and analyze data online
 - Benefits of digital design

Methods

- Recruitment:
 - Goal: To test questionnaire validity within UChicago sample
 - Population: UChicago community
 - Sampling frame: UChicago community members accessible via listservs, Martketplace, Facebook
 - Sample: actual respondents of recruitment
 - Target: 200 respondents

Analyses

- Descriptive statistics:
 - Distribution of anxiety scores
- Regression models:
 - Exogenous variables:
 - Setting, time of day, mood
 - Endogenous variable:
 - Trait anxiety score

Connection to research question: If extraneous factors of setting do not affect questionnaire responses, should see no relationship between the extraneous / exogenous factors of setting, time of day and mood, and anxiety scores.

Questions?

References:

Chapman, C. R., and Cox, G. B. (1977). Determinants of anxiety in elective surgery patients. In C. D. Spielberger and I. G. Sarason (Eds.), *Stress and anxiety* (Vol. 4, pp. 269–290). Washington, DC: Hemisphere/Wiley

Murthy, D. (2008). Digital ethnography: An examination of the use of new technologies for social research. *Sociology*, 42(5), 837-855.

Spielberger, C. D. (1989). *State–Trait Anxiety Inventory: a comprehensive bibliography*. Palo Alto, CA: Consulting Psychologists Press

Spielberger, C. D., Vagg, P. R., Barker, L. R., Donham, G. W. & Westberry, L. G. (1980). The factor structure of the State–Trait Anxiety Inventory. In I. G. Sarason and C. D. Spielberger (Eds.), *Stress and anxiety* (Vol. 7, pp. 95–109). New York: Hemisphere/Wiley