PSYC211 1B Ch.2 Research Methods

- Personality psychologists, Dan Wegner: Personality psychology is the science of human experience
- Thoughts, feelings and behaviour
- Some are easier and straightforward than other subjects but measuring one's feeling is tricky
- Preference and subjectivity and no objective answer

Capturing participant attention and interest
Experimenter Demand
- Hypothesis: following orders (authorities) leads to violence e.g. Stanley Milgram's electric shot experiment
- Experimenter: ok sir, we think you're the type of person who will follow our orders to violently shock the confederate
- Reactance: I think you want me to do A, so I am going to do anything but A
- It can change the results of the experiment, although the experimenter actually didn't want him to do A
- Social desirability: I'm going to nicely do A as you want me to do.
- Both can cause problems; threat to study

Unique challenges in Personality psych
- Measure subjective things
- Keep their attention focused properly
- The things (people) being studied know it and may have their own ideas about the study
- Tricky ethical issues to think about

Funder's second law: there are no perfect indicators of personality; there are only clues, and clues are always ambiguous
How to operationalize psych processes?
- Operationalization: the way a study measures a psychological processes
  e.g. big five personality inventory as measure of traits; extroverted or introverted, agreeable or disagreeable, etc.
  e.g. number of chili peppers given as measure of aggression
- To ask why behaviour occurred requires inference
  - Psychology and personality cannot be directly observed
  - We must infer processes from other observations
    - Inferences are always debatable; ice bucket as pain tolerance or self-control?

Laughter to horrible joke? Because of joy, nervousness or politeness? Inferences are always debatable

Operational definition of aggression
- How you measure a variable?
- Are you aggressive? How aggressive are you from1 to 10?
- Have you ever been in a fight?
- ⭐ Honour culture hallway study (in 1980s): reactive vs. proactive aggression
- Big gender difference in punching bag experiment; male was much more aggressive then female, but in a verbal aggression (gossip) female measured higher?

Evaluating measures
1. Validity; does it measure what you want it to measure?
   - What your favourite hotdog topping says about your ideal romantic partner? NO
   - Face validity: on the surface, does it appear to measure what it is supposed to measure?
   - Predictive validity: does your measure predict what it should predict? If I want to create a measure of risk-seeking, what things should it predict? Likelihood of going sky diving, gambling and trying new foods
     - Religiosity: belief, frequency of prayer, church attendance, etc.
       □ Charity? Morality? Socially conservative? Not necessarily related
   Convergent Validity: does the measure correlate with other measures it should correlate with?
     - Converge = go together
     - athleticism should correlate with running speed and jumping height
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2. Reliability; is it consistent in measuring it?
  - Does the measure consistently tap into what you want to measure?
    - At different times of day, in different contexts, repeated across time, with different populations
  - If not, maybe there's measurement error; measuring stuff it's not supposed to
  - Education measure: how many languages do you speak?
  - Factors that reduce reliability
    - Low precision of measurement: scales of 1-3 vs. 1-100
    - The state of the participant: could be dependent on factors outside study e.g. start of term (keeners) vs. end of term (scramblers)
    - The state of the experimenter: person, behaviour, lack of consistent script, abnormal e.g. greeting manner, etc.
    - The environment: temp., weather, noise, etc.
  - Boosting reliability
    - Clean your data: standardize things and code properly, etc.
    - Use a standardized procedure or protocol
    - Measure something that is important and engages participants
    - Aggregation: especially important for predicting behaviour, allow random (unrelated) influences to cancel each other out……Reduces error
  - Attention checks!
    - If you're reading this, answer "strongly agree" especially online survey
    - Ask simple questions like what is 5+7
    - Easy to spot the participants who were not paying attention
    - Explain your answer e.g. I want to lay you down in a bed of roses for tonight I sleep on a bed of mess
  - Validity and reliability in bull's eye
3. Generalizability; how far can you extend your conclusions from your results?
  - Do the results of your study generalize outside the study?
  - Generalizability to other populations
  - WEIRD Participants: Western, Educated, Industrialized Countries, Rich Countries, and Democratic Countries
  - College students versus others
  - Gender (pre-1970s all studies done on men because wanted to avoid gender differences that can explain the results)
  - Shows vs. no show up
  - Generalizability to other procedures?
    - Many ways to measure personality
    - Will you get consistent results?

PSYC211 2A Research Method 2
Source of Data
Outline - Different kinds of data, Pros and cons
Four basic types of data: Self-report, Informants, Life Outcomes, Behavioural Observation, and Bonus type (Biology)

S data :
 self-judgments of self-reports
	- Usually questionnaires or surveys
	 - Most frequent data source
	 - High face validity
	 e.g. do you like to be the life of the party? How happy are you? Do you feel cold right now? etc.
	 - **Advantages of self report**
	   • based on a large amount of information
	     ○ you are always with yourself, people are usually their own best expert
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	   • Access to thoughts, feelings, and intentions
	     e.g. why did you kick him? What were your first thoughts when you won the lottery? Are you mad at me?
	   • Definitional truth
	     ○ *Do you feel good about yourself? Do you think you can do it?*
	   • Causal force
	     ○ Efficacy expectations *e.g. whether you think you can, or think you can't you're right.*
	     ○ *Are you a charitable person?* (Produces more donations, It shapes people's behaviour as everyone want to feel themselves good.)
	     ○ Push polling *(Do you support our candidate or do you hate babies?)*
	 - Example
	   • *How good are you at the following things?* Driver, honesty, sense of humor, social skills, good looks, and intelligence
	   • Better than average effect; positively bias, especially introverted vs. extraverted (not good or bad things)
	 - **Disadvantages of self report**
	   • Maybe people won't tell you what they really think
	   • Sensitive questions and personal information *e.g. how much money do you make? How many sexual partners have you had?*
	   • Questions that could make them look bad *e.g. would you say you are antisocial? Are you a selfish person?*
	   • Questions that could interfere with relationships *e.g. who did you vote for? Do you think you're better than your friends?*
	   • They don't want to share
	   • Nisbett and Wilson (1977) - maybe people CANNOT tell you
	     ○ Review concluded that people can be:
	     A) unaware of a stimuli that elicit a response - unconscious priming
	     B) Unaware of a response - I didn't realize I did that (lost keys), lack of attentions
	     C) Unaware of the stimulus -> response link (I don't know what the connection was), unaware of link e.g. the model in the car advertisement, finding reasons for all our behaviour; reflecting theory of psychology
	 - **Beeper Method** 1990s vs Today - *What makes people the most motivated by?*
	   • The number one motivator was sleep. People are most motivated by sleep
	 - **More advantages of Self Report**: it's easy, research dollars are finite (cheap to collect), saves researcher time, fast answers to scientific questions, access to larger samples, but too easy - crowds out other methods

Informant Report (I) Data	- Acquaintances, coworkers, clinical psychologists, and so on - No training or expertise needed - Based on observing people in whatever context they know them from - Used frequently in daily life; *what's she like? Is she nice? Good to work with?* - Ask someone who knows the person, Can overcome problems with introspection and desirability e.g. rude behaviour - A kind of 'self-report': comes with similar issues, social desirability - Personal bias: parents judging relationship quality - Salience of certain interactions: emotional, unusual, extreme behaviours most remembered - People rely on narratives : seem like such a good boy - Lack of first person **insight**: Attributional errors*, e.g. he meant to harm ……* • sometimes a good thing, *I'm not a racist! What I said isn't who I am!*

Life Outcomes (L) Data	- Obtained from archival records, social media, or self-report
	 - The results, or "residue", of personality
	 - **Advantages** of life outcomes data
	   • Objective and verifiable, publicly available, often important outcomes (criminal record, housing status, alive, etc.)
	 - **Disadvantages** of life outcomes data
	   • Multideterminant (what caused it?) low conscientiousness

Behavioural Observation	- **Multideterminism**: outcome is a big leap from personality: low conscientiousness -> ? -> death
	   • Behaviour is a big leap from personality: [**Personality**] -> [**SOMETHING IN YOUR MIND**] -> [**Behaviour**]
	   • Behaviour is objective measure
	   • Bypass problems of self-report: *said you wouldn't but you did……*
	   • **Operationalization** often closer to aims of study
	     ○ Risk-taking: dollar amount someone bets in blackjack
	     ○ Persistence: length of time working on a tough anagram
	     ○ Addiction: consumption of drugs
	     ○ Aggression: amount of hot sauce given
	   • **Issues** with behaviour
	     ○ social desirability: behaviour can be changed temporarily, Lots of work, Most behaviour is finger movements or games

- Multiple methods, Every method has limitations, Strengths of one match weakness of another, Takes times, money, effort to run more studies

Replication issues
- Many psychology (science) studies don't replicate, Bad incentives: rewarded for publishing, not for correcting mistakes, Significant results more publishable than null results

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Overcoming limitations of methods
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- • P hacking: report study in a way that makes it look better than it really is, small studies especially vulnerable

Overly flexible analysis
- • Listening to when I'm 64 by the Beatles makes you older? Impossible! How?
- • Significant means **unlikely** to have happened by chance if you look once. But what if you stop and look many times? Not so unlikely! What if your hypothesis is flexible? It could make you older or younger or look more like Ringo or have more siblings or maybe listening only works if you haven't heart the song before or ……

Fixing replication
- • Psychology ahead of the rest of science
- • Preregistration - can't p-hack if you say what you will do ahead of time
- • Larger samples - tradoff; most studies now online, lab studies too much work
- • Replication efforts - large multi-lab replication studies on key phenomena
- • Still have bad incentives

PSYC211 3A Ch.4 Traits and Situations

What is a personality trait and how do traits relate to situations?
Replication debate

Trait Approach to Personality
- Identify fairly stable psychological and behavioural tendencies that differ between people

Traits vs. states
- Traits: stable individual differences e.g. narcissism, agreeableness, and paranoia
- States: current individual differences between people
  - High self-esteem from winning a game or trait narcissism
  - Friendliness when in a good mood or all the time
  - Paranoia because they are after you or a delusion

⭐ Trait Approach: Two Key Points
1. Trait approach is based on empirical research.
    a. Mostly **correlational**: Hard to randomly assign traits
    b. EMPHASIS on **accurate** measurement of traits: Valid, Reliable, Generalizable
    c. Traits should be able to PREDICT **behaviour**
2. Trait approach focuses on individual differences
    a. **Strength**: assesses and attempts to understand how people **differ** - *how extraverted are you? Relative to other people, there is no objective minimum nor maximum but there is a range of differences*
    b. **Weakness**: neglects aspects of personality common to all people and how each person is **unique**, e.g. *there is no scale for people who grown up in your particular house as it is very small number*

Why do people do what they do?
- Personality **traits**
- Things caused by the **situation**
- Human/cultural **universals**: Blink response, Grief
- Individual **uniqueness**: just because, debate whether this is its own category

Person situation Debate - Walter Mischel (1968) who is well-known for the marshmallow study
- *Which is more important for determining what people do, the person or the situation?*
- Power of the situation - Milgram, Zimbardo, and Asch's experiments
- Do we even need to study personality then?

Arguments for situationism
- How well do personality measures predict behaviour?
- Correlations rarely exceeded 0.30 although Nisbett says 0.40, and maximum 0.50
- ⭐ Low predictability in personality?
  - R=.4 is not so small! Barnum Effect

Personality might be bigger in real world
- Consistent behaviour over time and situations, not particular situations
- Extraversion doesn't mean party every night
- Single measure at T1 limits personality predictability
- Lab studies - control situation closely e.g. aiming significant differences between conditions as much as possible, setting of study matters
- General personality; specific situation e.g. disagreeableness, but did the situation anger you?

Arguments for situationism
- Situation + Personality = Behaviour
- **X + 0.4 = 1.0? Situation more important! Wrong! Situation also 0.3 to 0.4**
- **Measurement error, other traits**

Absolute versus relative consistency
- Individual differences are maintained across situations, even when absolute behaviour changes
- Situations influence behaviour, but people are still consistent

No "obvious" studies
- Scientists don't run obvious studies *e.g. Do religious people pray more than nonreligious? Do dog owners pic more dog hair off their clothes?*

Final thoughts on situationism
- If situation determines behaviour, who's responsible?
- Personality allows for responsible behaviour
- People are different and this matters