

Week 5 – Personality (Consequential Outcomes):

Why might personality predict life outcomes?

- **Direct effects:** predicting from the general to the particular. E.g. does conscientiousness predict specific expressions of conscientious behaviour?
- **Indirect effects:** 'mediation' – where some intervening variable or process forms a link in the chain between personality & outcome. E.g. via situation selection (for instance, because John is higher in openness, he is more likely to put himself in a certain situation or pursue certain goals that lead to a particular outcome).
- **Interactive/conditional effects:** refers to person x environment interactions. E.g. via differential reactivity to events/situations. For instance, someone low in neuroticism may respond more strongly/in a more adaptive way to a certain event associated with a certain life outcome.

History of prediction:

- **The Lexical Hypothesis:** *important* personality characteristics will, over human history, be coded in language.
 - Personality characteristics will be *important* if they enable us to make predictions about what other individuals are going to do.
 - For example, who might help us, who might hurt us, who will offer leadership, who is reliable.
- **Formal assessment of personality & abilities:** e.g. in educational contexts.
 - *Binet & Simon (1905, 1908, 1911)* identified children who may benefit from alternate education.
 - Development of the Scholastic Aptitude test (SAT) in 1926.
- **Occupational contexts:**
 - Military selection & placement under *Robert Yerkes (1915)*
 - 1950s-1970s diversification & mobility of work
 - Growth of Human Resources management

The prediction of achievement:

Job performance:

Schmidt & Hunter (1998):

- Conducted a meta-analysis of 85 years of research to predict certain outcomes.
- Predictors included abilities, personality traits, work experience, references etc.
- Criterion was job performance – typically measured in terms of supervisory ratings (but other indicators too including sales records)
- **Employment interviews** were found to be the biggest predictor of achievement at work.
- **Conscientiousness** was found to be strongly associated with higher job performance ($r = 0.31$).
- **Integrity tests** (a blend of conscientiousness & agreeableness) were also found to be strongly associated with higher job performance ($r = 0.41$).
- The strongest individual differences predictor was found to be **cognitive ability** (or 'intelligence'), $r = 0.51$. But, personality *adds* to the predictive validity of cognitive

ability (e.g. combining cognitive ability with an integrity test leads to the highest predictive association, $r = 0.65$).

Barrick & Mount (1991, 1998):

- Conscientiousness predicts **performance across all occupations** (especially so for *effort-related* [rather than skill-related] criteria).
- Extraversion predicted performance well in two specific job areas – **management & sales**.

Hurtz & Donovan (2000):

- Performed an updated meta-analysis to check the replicability of earlier findings.
- Conscientiousness predicts **job performance moderately** in the region of $r = 0.2$ (moderate predictive effect).
- Agreeableness, openness/intellect & low neuroticism predicts performance in **customer service roles**.
- Extraversion & low neuroticism predicts performance in **management & sales roles**.

Occupational success:

- Indices typically reflect popular views of job desirability or ‘prestige’ related to wages, years of education required, etc.
- E.g. Duncan socioeconomic index – typical top scorers include doctors, dentists, lawyers.

Predictors of occupation success include:

- **Openness/intellect:** $r = 0.18$ (*Sutin et al., 2009*)
- **Extraversion:** $r = 0.16$ (*Roberts et al., 2003*)
- **Conscientiousness:** $r = 0.15$ (*Roberts et al., 2003*)
- Personality predicts various indicators of occupational success (income, promotion etc.) up to 47 years later.

Educational achievement:

- A combination of **cognitive ability and conscientiousness** predicts **achievement across programs** (*Kuncel et al., 2001*).
- *Poropat (2009)* predicted school/university GPA from:
 - Cognitive ability: $r = .25$
 - Conscientiousness: $r = .22$
 - Openness/intellect: $r = .12$
 - Agreeableness: $r = .07$

- Of personality measures, only **conscientiousness** adds to prediction above cognitive ability.

Educational attainment:

- E.g. highest level completed/years spent in full time education.
- **Openness** is consistently the strongest predictor; $r \sim .35$

Educational engagement:

- **Openness** predicts **intrinsic motivation** (interest & enjoyment of study topics) in university students; $r \sim .35$.
- Openness also predicts **breath/depth of reading** in university students; $r \sim .25$

Choice of college major:

- **Extraversion**: economics, law, political science & medicine.
- **Neuroticism**: arts, humanities, psychology.
- **Agreeableness**: medicine, psychology, sciences, arts & humanities.
- **Conscientiousness**: science, law, economics, engineering, medicine & psychology.
- **Openness/intellect**: humanities, arts, psychology & political science.

Why does personality predict achievement?

1. Direct effects (*from the general to the particular*): e.g. expressions of conscientiousness. Conscientiousness predicts most strongly for *effort-related* criteria.

2. Indirect effects (*mediation*): selecting into a program of study that increases later likelihood of particular kinds of outcomes. For example, conscientiousness & extraversion predict 'occupational success' (higher wages etc.) *via* choice of major (e.g. law).

E.g. *Corker et al., 2012*:

- Found that use of **effortful study strategies** explained the relation between conscientiousness & educational achievement (i.e. conscientiousness leads to the use of effortful study strategies, which leads to better academic performance).

3. Interactive effects (*moderation*): e.g. responding to the demands of work, extraverts may respond well to the interpersonal challenges of leadership & management roles. E.g. extraverts respond more strongly to rewards (*Smillie & Wacker, 2015*). Salesforce control systems make use of rewards (i.e. commissions & bonuses). Management roles bring a range of rewards (e.g. pay, status).

E.g. *Stewart, 1996*:

- Extraversion only predicts performance in salespeople when performance is linked with rewards.
- If new sales are rewarded, then extraversion predicts new sales (but not customer retention). If customer retention is rewarded, then extraversion will predict customer retention (but not new sales).