

Psychology 360: Personality Research

William Revelle

November 21, 2022

1 Outline (to be added to frequently – keep checking)

This is the abbreviated form of the syllabus, The full syllabus is at <https://personality-project.org/courses/360.syllabus.pdf>

Current version of November 21, 2022

1.1 News of changes

September 26: Correct link to the NPR program on the Meyers Briggs: [part 1](#)
Added a link to a preprint by [Beck et al.](#) discussing the Big Few as a model for the college student. See [Deep lexical structure](#) for an alternative approach to personality taxonomies ([Cutler and Condon, 2022](#))

September 28: Updated the slides on [Introversion/Extraversion](#) and theory development. Included the citations to some of the classic studies.

October 3: Updated the [Introversion/Extraversion and affect](#) slides. Added a few more readings to the slides. Midterm study questions will appear by Friday. Midterm to be on Wednesday, October 12.

October 5: Improvements to the [Achievement Motivation](#) slides.

October 8: Midterm [study questions](#) are posted. I will choose a subset and then you can answer yet a smaller subset.

October 9: Minor improvements to the [anxiety](#) slides.

October 17: Updated the correlation slides. Moved the due date for the proposal to next Monday.

October 31: Updated the various measurement slides.

November 21: Added the discussion of how to analyze the final project data

2 Daily assignments and notes

Week	Topic	Lecture Notes	Readings	Secondary Readings
1	Multiple approaches to personality research	Introduction to the course	Revelle, Wilt and Condon (2011) Individual differences and differential psychology: A brief history and prospect Revelle and Oehlberg (2008) Integrating experimental and observational personality research Atherton et al. 2021 Why has personality psychology played an outsized role in the credibility revolution?	Take the SAPA inventory your scores are anonymous Revelle (2007) Experimental Approaches to Personality Research
2a	Personality Taxonomies	Taxonomies of Personality The Big Few	Revelle (1995) Personality Processes Francis Galton Charles Spearman Deep lexical structure Cutler and Condon (2022)	Revelle, Condon and Wilt (2011) Methodological Advances in Differential Psychology Romer and Revelle (1984) A critique of the systematic distortion hypothesis
2b	Extraversion	Extraversion	Wilt and Revelle (2016) Extraversion Hans Eysenck	The personality coefficient
3a	Extraversion and affect	Extraversion and Affect	Wilt et al. 2007 Hans Eysenck: Personality theorist (Revelle, 2016) Smillie et al. 2012	Fleeson (2001) Smillie et al
3b	Achievement Motivation	Achievement motivation Dynamic models	A model of performance History of dynamic models	Elliot and McGregor, 1999 Elliot and Thrash, 2010 Sommet and Elliot, 2017
4a	Anxiety	Anxiety, Negative Affect	The ABCDs of anxiety	(Rogers and Revelle, 1998)
4b	Midterm	midterm study questions		midterm study questions
6	Psychometrics	Introduction to psychometrics		Introduction to R
6 b	Multiple r and R	Multiple R and R	Using R for personality	Getting started in R
7	Factor analysis and Reliability Theory	Factor analysis Research Proposal due (delayed) Classical test theory	Reliability from α to ω	How to use psych for FA Finding omega
8	The "New psychometrics"	Item Response Theory		Scoring scales
9	Measurement	Constructing and validating scales Methods of scale construction Comparing levels of scale reduction PWAS Cognitive Ability	Validation using peer ratings (Zola et al., 2021) Scale construction Revelle and Garner (2022) (Revelle et al., 2021) ICAR (Revelle et al., 2020)	Early SAPA Dworak et al. (2021)
10	Cognitive Ability	Proposals	Pitfalls in research	
10b	Final Projects	other areas	Kuncel and Sackett	
11	Course Review	Scoring scales and analysis		
12	Reading week			

3 Daily detail— Still in progress

3.1 The structure of personality

1. Sept 21: [Revelle, Wilt and Condon \(2011\)](#) Individual differences and differential psychology: A brief history and prospect ([Revelle et al., 2011b](#))

[Revelle and Oehlberg \(2008\)](#) Integrating experimental and observational personality research ([Revelle, 2007](#))

See the recent paper in *Personality Science* on the strengths of personality research ([Atherton et al., 2021](#)).

2. Week 2: Sept 26; Taxonomic approaches to personality [Revelle \(1995\)](#) [Personality Processes](#): Annual Review of Psychology. ([Goldberg, 1990, 1992](#))

Traits are facts, not fictions ([Romer and Revelle, 1984](#); [Norman and Goldberg, 1966](#))

But perhaps rather than emphasizing the Big Few we should focus on the Many Little ([Condon et al., 2020](#); [Möttus et al., 2020](#)).

The methods in personality are diverse ([Revelle et al., 2011a](#)).

3. Week 3: October 3: A major dimension of personality is [Extraversion](#) ([Wilt and Revelle, 2016, 2009](#)) how people differ in their approach behavior and their positive affect. Causal theories emphasized differences in rates of learning, differences in overall arousal ([Eysenck, 1967](#)) and to differences in

sensitivity to cues for reward (Gray, 1991; Corr, 2002, 2008). How does acting extraverted make you happy (McNiel and Fleeson, 2006; Smillie, 2013; Smillie et al., 2012)

4. Week 4: October 10: A non-biological approach is found in the study of [Achievement Motivation](#) which includes both static and [Dynamic models](#) of behavior (Revelle and Wilt, 2021) , Crucial studies have been done by Andrew Elliott and his colleagues (Elliot and Thrash, 2002; Cury et al., 2006; Elliot and Thrash, 2010) NOTE: There is no class on October 12
5. Week 5: October 17: Anxiety as an important dimension [Anxiety](#). Including a review by (Wilt et al., 2011) discussing the ABCDs of anxiety.
Do the dimensions of mood allow for an integration with the structure of traits?

3.2 Personality Measurement

An introduction to issues in [psychometrics](#) How do we measure things? What is the correlation coefficient and why it is so useful?

6. Week 6: October 24: Continuing with correlation. The multiple correlation and problems of interpreting correlations.
Data reduction and theoretical clarity by using [Factor and components analysis](#).
7. Week 7: October 31: How well do we measure things? The many questions of [Classical and modern reliability theory](#). Revelle and Condon (2019) is a useful overview of reliability theory. Revelle and Garner (2022) outline the steps in scale construction.
8. Week 8: November 7th Why use R. The ability to report reproducible results [Using R-Markdown for reporting research](#)
9. Week 9: The steps of personality measurement. Multiple ways to construct scales. Some early (Revelle et al., 2010) and recent (Zola et al., 2021), (Revelle et al., 2021) examples of validating personality measures. The study of cognitive ability is part of the study of personality (Condon and Revelle, 2014; Revelle et al., 2020), as is the study of interests.
10. Week 10: Course review and how to use *psych* to analyze your data. See the relevant vignettes:
 - (a) An [introduction](#) (vignette) of the *psych* package
 - (b) An [overview](#) (vignette) of the *psych* package
 - (c) [Installing R](#) and some useful packages
 - (d) Using R and the *psych* package to find ω_h and ω_t .
 - (e) Using R and the *psych* for [factor analysis](#) and principal components analysis.
 - (f) Using the `scoreItems` function to find [scale scores and scale statistics](#) (this document).
 - (g) Using `mediate` and `setCor` to do [mediation, moderation and regression analysis](#)

References

- Atherton, O. E., Chung, J. M., Harris, K., Rohrer, J. M., Condon, D. M., Cheung, F., Vazire, S., Lucas, R. E., Donnellan, M. B., Mroczek, D. K., Soto, C. J., Antonoplis, S., Damian, R. I., Funder, D. C., Srivastava, S., Fraley, R. C., Jach, H., Roberts, B. W., Smillie, L. D., Sun, J., Tackett, J. L., Weston, S. J., Harden, K. P., and Corker, K. S. (2021). [Why Has Personality Psychology Played an Outsized Role in the Credibility Revolution?](#) *Personality Science*, 2(1):1–21.
- Beck, E. C., Condon, D. M., and Jackson, J. J. Interindividual age differences in personality structure. <https://psyarxiv.com/857ev/>.
- Condon, D. M. and Revelle, W. (2014). The [International Cognitive Ability Resource](#): Development and initial validation of a public-domain measure. *Intelligence*, 43:52–64.

- Condon, D. M., Wood, D., Möttus, R., Booth, T., Costantini, G., Greiff, S., Johnson, W., Lukaszewski, A., Murray, A., Revelle, W., Wright, A. G. C., Ziegler, M., and Zimmermann, J. (2020). [Bottom Up Construction of a Personality Taxonomy](#). *European Journal of Psychological Assessment*, 36(6):923–934.
- Corr, P. J. (2002). J. A. Gray’s reinforcement sensitivity theory and frustrative nonreward: A theoretical note on expectancies in reactions to rewarding stimuli. *Personality and Individual Differences*, 32(7):1247–1253.
- Corr, P. J. (2008). Reinforcement Sensitivity Theory (RST). In Corr, P. J., editor, *The Reinforcement Sensitivity Theory of Personality*, pages 1–43. Cambridge University Press, Cambridge.
- Cury, F., Elliot, A. J., Da Fonseca, D., and Moller, A. C. (2006). The social-cognitive model of achievement motivation and the 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology*, 90(4):666–679.
- Cutler, A. and Condon, D. M. (2022). Deep lexical hypothesis: Identifying personality structure in natural language. *arXiv preprint arXiv:2203.02092*.
- Dworak, E. M., Revelle, W., Doebler, P., and Condon, D. M. (2021). [Using the International Cognitive Ability Resource](#) as an open source tool to explore individual differences in cognitive ability. *Personality and Individual Differences*, 169.
- Elliot, A. J. and Thrash, T. M. (2002). Approach-avoidance motivation in personality: Approach-avoidance temperaments and goals. *Journal of Personality and Social Psychology*, 82:804–818.
- Elliot, A. J. and Thrash, T. M. (2010). Approach and avoidance temperament as basic dimensions of personality. *Journal of Personality*, 78(3):865–906.
- Eysenck, H. J. (1967). *The biological basis of personality*. Thomas, Springfield.
- Goldberg, L. R. (1990). An alternative “description of personality”: The big-five factor structure. *Journal of Personality and Social Psychology*, 59(6):1216–1229.
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment*, 4(1):26–42.
- Gray, J. A. (1991). The neuropsychology of temperament. In Strelau, J. and Angleitner, A., editors, *Explorations in temperament: International perspectives on theory and measurement*, pages 105–128. Plenum Press, New York, NY.
- McNiel, J. M. and Fleeson, W. (2006). The causal effects of extraversion on positive affect and neuroticism on negative affect: Manipulating state extraversion and state neuroticism in an experimental approach. *Journal of Research in Personality*, 40(5):529–550.
- Möttus, R., Wood, D., Condon, D. M., Back, M., Baumert, A., Costani, G., Epskamp, S., Greiff, S., Johnson, W., Lukaszewski, A., Murray, A., Revelle, W., Wright, A. G., Yarkoni, T., Ziegler, M., and Zimmerman, J. (2020). Descriptive, predictive and explanatory personality research: Different goals, different approaches, but a shared need to move beyond the big few traits. *European Journal of Personality*, 34(6).
- Norman, W. T. and Goldberg, L. R. (1966). Raters, ratees, and randomness in personality structure. *Journal of Personality and Social Psychology*, 4:681–691.
- Revelle, W. (2007). Experimental approaches to the study of personality. In Robins, R., Fraley, R. C., and Krueger, R. F., editors, *Handbook of research methods in personality psychology*, pages 37–61. Guilford, New York.
- Revelle, W. (2016). [Hans Eysenck: Personality theorist](#). *Personality and Individual Differences*, 103:32 – 39. Hans Eysenck: One Hundred Years of Psychology.
- Revelle, W., Condon, D., and Wilt, J. (2011a). [Methodological Advances](#) in differential psychology. In Chamorro-Premuzic, T., Furnham, A., and von Stumm, S., editors, *Handbook of Individual Differences*, chapter 2, pages 39–73. Wiley-Blackwell.

- Revelle, W. and Condon, D. M. (2019). [Reliability: from alpha to omega](#). *Psychological Assessment*, 31(12):1395–1411.
- Revelle, W., Dworak, E. M., and Condon, D. M. (2020). [Cognitive ability in everyday life: the utility of open source measures](#). *Current Directions in Psychological Science*, 29(4):358–363.
- Revelle, W., Dworak, E. M., and Condon, D. M. (2021). [Exploring the persome: The power of the item in understanding personality structure](#). *Personality and Individual Differences*, 169.
- Revelle, W. and Garner, K. M. (2022). Measurement: Reliability, construct validation, and scale construction. In Harry T. Reis, T. W. and Judd, C. M., editors, *Handbook of Research Methods in Social and Personality Psychology*.
- Revelle, W., Wilt, J., and Condon, D. (2011b). [Individual Differences and Differential Psychology: A brief history and prospect](#). In Chamorro-Premuzic, T., Furnham, A., and von Stumm, S., editors, *Handbook of Individual Differences*, chapter 1, pages 3–38. Wiley-Blackwell, Oxford.
- Revelle, W., Wilt, J., and Rosenthal, A. (2010). Individual differences in cognition: New methods for examining the personality-cognition link. In Gruszka, A., Matthews, G., and Szymura, B., editors, *Handbook of Individual Differences in Cognition: Attention, Memory and Executive Control*, chapter 2, pages 27–49. Springer, New York, N.Y.
- Revelle, W. and Wilt, J. A. (2021). [The history of dynamic approaches to personality](#). In Rauthman, J., Funder, D., and Sherman, R. A., editors, *The Handbook of Personality Dynamics and Processes*, chapter 1, pages 3–31. Elsevier.
- Rogers, G. M. and Revelle, W. (1998). [Personality, mood, and the evaluation of affective and neutral word pairs](#). *Journal of Personality and Social Psychology*, 74(6):1592–1605.
- Romer, D. and Revelle, W. (1984). [Personality Traits: Fact or fiction? a critique of the Shweder and D’Andrade systematic distortion hypothesis](#). *Journal of Personality and Social Psychology*, 47(5):1028–1042.
- Smillie, L. D. (2013). Why does it feel good to act like an extravert? *Social and Personality Psychology Compass*, 7(12):878–887.
- Smillie, L. D., Cooper, A., Wilt, J., and Revelle, W. (2012). Do extraverts get more bang for the buck? refining the affective-reactivity hypothesis of extraversion. *Journal of Personality and Social Psychology*, 103(2):306–326.
- Wilt, J., Oehlberg, K., and Revelle, W. (2011). [Anxiety in Personality](#). *Personality and Individual Differences*, 50(7):987–993.
- Wilt, J. and Revelle, W. (2009). [Extraversion](#). In Leary, M. R. and Hoyle, R. H., editors, *Handbook of Individual Differences in Social Behavior*, chapter 3, pages 27–45. Guilford Press.
- Wilt, J. and Revelle, W. (2016). [Extraversion](#). In Widiger, T., editor, *The Oxford Handbook of the Five Factor Model*. Oxford University Press, New York, N.Y. DOI: 10.1093/oxfordhb/9780199352487.013.15.
- Zola, A., Condon, D. M., and Revelle, W. (2021). [The Convergence of Self and Informant Reports in a Large Online Sample](#). *Collabra: Psychology*, 7(1). 25983.