

PSYCHOLOGY 8935
READINGS IN BEHAVIORAL GENETICS AND INDIVIDUAL DIFFERENCES
PSYCHOLOGY (1 Credit S/N)

Spring, 2008
MONDAY, 12:00 – 1:00; N227 ELLIOTT HALL

The journal club in Individual Differences Psychology and Behavioral Genetics continues this Spring. The format for the journal club is relatively freewheeling and eclectic. Each week participants are expected to read 2-3 related articles and come prepared to discuss that article during the appointed hour. Nobody takes primary responsibility for leading the discussion; rather the expectation is that each participant will come prepared to discuss the readings for that week.

There are no prerequisites for enrolling in this seminar other than intellectual openness. In the past, the seminar has had participants from a broad array of backgrounds including Behavior Genetics, Social, Clinical, Industrial/Organizational Personality, Cognitive and Biological, and Counseling. All are welcome. Students who are interested should let Matt McGue know and **register for 1 credit S/N**. The seminar will begin on Monday January 28. The readings for the first and remaining meetings are given below. Readings are available in pdf format from the course website (if queried the account # is psy8935, the pw is behgen). **Note that we will begin discussing articles at our first meeting.**

Week #1 – January 28: Oh Joy

Comment: The new year probably helped us all feel a bit more optimistic, but proponents of the set-point theory of happiness tell us that that joy will quickly dissipate, probably by around the time we start classes. But are we really constrained by set-points, which David Lykken showed were largely determined by the genes we inherit, or can we hope to soar to new heights of bliss (or I suppose depths of despair)? Recent research suggests some need for amending our models of happiness. Don't let me give you any ideas, but ever wonder what would happen if you got divorced? Gardner and Oswald (2006) did, with some interesting results. They didn't stop there, but also went on to ask what would happen if you won the lottery (Gardner & Oswald, 2007). At the other end of the continuum, Lucas (2007) provides some interesting findings on the impact of disability that questions conventional wisdom in this area.

Week #2 – February 4: Is Ridicule the Answer?

Comment: As I think we all know, the California schools set out to boost the self esteem of the millions of children in their charge. But is this a good idea? Some think not. In particular, Forsyth et al. (2007) argue, with empirical evidence, that praise results in marginal students doing poorly, while Menon et al. (2007) suggest that high self-esteem

increases the likelihood that aggressive kids aggress. But the paper by Trzesniewski et al. (2006) makes it all seem more complicated than that. We will have to try and sort this all out, for the benefit of our children and students.

Week #3 – February 11: No Meeting – I will be out of town

Week #4 – February 18: Causality

Comment: Maybe Structural Equation Modeling really did solve the causality conundrum for our discipline, but at least when I think about it I have a hard time coming up with examples of major causal insights achieved through SEM. Maybe you can provide some examples. In any case, Rutter (2007) provides what I believe is a very compelling argument for the major alternative to SEM, the use of so-called Natural Experiments. Another way of thinking about addressing the problem is to try and correct for confounding. McNamee (2003) provides an epidemiologist's perspective on dealing with confounders, while, in a real classic, Meehl (1971) explains the problem for psychologists.

Week #5 – February 25: Woe is Me

Comment: We've talked about the true source of happiness and how to tell a chicken from an egg, so it is time to put all our new found knowledge to good use to figure out the origins of depression. Personen (2007a) uses a novel "Natural Experiment" to assess the effect of parental separation in childhood on adult depression. In a critique that harkens to some of Meehl's concerns, Gilman (2007) questions the validity of Personen's causal inferences, which of course requires an author response (Personen et al., 2007b). Lorant et al. (2007) use a more standard longitudinal design to assess factors affecting depression rates.

Week #6 – March 3: IQ

Comment: The article by Linda Gottfredson (2007) is an interesting mix of speculation on the evolutionary origins of general intelligence and empirical findings relating IQ to various novel outcomes (e.g., accidents). We will pair this with a truly remarkable randomized investigation of the effects on IQ of institutional versus foster care that was published by Chuck Nelson and colleagues (Nelson et al., 2007). The unique nature of the Nelson study generated commentary from ethicists (Millum & Emanuel, 2007), which we will also read.

Week #7– March 10: Are We Experiencing the Renaissance or Nadir of Personality Research?

Comment: A recent single issue of *Perspectives on Psychological Science* offered two seemingly contrasting perspectives on the state of personality research. Roberts et al. (2007) review the many correlates of personality measures and argue that personality is

just as important as IQ and SES in predicting important life outcomes. Alternatively, Baumeister et al. (2007) argue that personality researchers (like Roberts and colleagues?) focus on studying introspective responses to hypotheticals rather than actual behavior. Interestingly, there are numerous Minnesota connections here. On the Roberts article, are co-authors Kuncel (graduate and current faculty) and Shiner (graduate), while on the Baumeister article there is Vohs (current faculty in the business school).

Week #8 – March 17: SPRING BREAK

Week #9 – March 24: Breast Feeding

Comment: Okay, maybe not your number one favorite topic for this seminar, but this past year there were a couple really interesting publications in this area. First is the study by Der et al. (2006), which concludes that while breastfeeding has numerous benefits cognitive functioning does not appear to be one. The accompanying editorial by Jacobson and Jacobson (2006), which we will also read, concurs. But, Caspi et al. (Caspi et al., 2007) report a very interesting GxE analysis that suggests that breastfeeding may indeed be cognitively beneficial, but only for a subset of infants. Now why can't we do that?(!)

Week #10 – March 31: Sorry I am away again!

Week #11 – April 7: Epigenesis

Comment: Epigenetics has taken the more biologically oriented subfields of behavioral science by storm. But is it a transient fad or a new paradigm? Kaffman and Meaney (2007) provide an excellent and comprehensive review of their important work on maternal care in the rat pup. There are some areas where epigenetics has produced a body of empirical results, these include cancer and nutrition. Waterland and Michels (2007) review the latter with a particular focus on how early epigenetic effects can help explicate the Developmental Origins Hypothesis (i.e., the Barker Effect).

Week 12 – April 14: GxE Sociological Perspectives

Comment: If epigenesis is not a fad, then GxE certainly is. Everybody now seems to want to work with genetic data. This week we will read two conceptual papers on GxE from sources that were probably not much interested in genetics 5 years ago. To me, Belsky et al. (Belsky, Bakermans-Kranenburg, & van Ijzendoorn, 2007) seems like a restatement of the diathesis-stress model, but I am probably missing something. Conger and Donnellan (2007) are specifically interested in the effects of SES, which, surprise, they conclude are interactive.

Week 13 – April 21: Passover, out of town

Week 14 – April 28: A Special Minnesota Population Center Colloquium

Comment: Kaare Christensen, the Director of the Danish Twin Registry, will be talking at the Minnesota Population Center Colloquium series from 12:15-1:15 PM in 50 Willey Hall this day. They have great treats, and it is sure to be an entertaining seminar. It would be great if we had good attendance there, and I am requiring that registered students attend this (and yes, I will take attendance).

Week 15 – May 5: Sex

Comment: We will end the year discussing a favorite topic. Hay (2007) offers an interesting perspective on the developmental origins of sex differences in aggression, while Ellegren and Parsch (2007) provide an excellent review and discussion of evolutionary/genetic mechanisms in sex differences.

FULL CITATIONS

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- Der, G., Batty, G. D., & Deary, I. J. (2006). Effect of breast feeding on intelligence in children: prospective study, sibling pairs analysis, and meta-analysis. *British Medical Journal*, 333(7575), 945-948A.
- Ellegren, H., & Parsch, J. (2007). The evolution of sex-biased genes and sex-biased gene expression. *Nature Reviews Genetics*, 8(9), 689-698.
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- Meehl, P. E. (1971). High school yearbooks: A reply to Schwarz. *Journal of Abnormal Psychology*, 77(2), 143-148.
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