So why do we have this notion of the “mad scientist” the “the mad creative genius” and “crazy artist?” Is there something to these notions that there is something not quite right about our creative people? And, if so, what are the commonalities that both groups express? Are there commonalities?

These commonalities could be many: what provokes or holds their attention, what their skill sets are, what their imaginations are like, what influences they seek and what influences attract them, how qualitatively different do they see the world and are there cognitive aspects of these qualitative insights that differ systematically?

And the reverse could be asked of our “crazies”: are their aspects of schizotypy that creative ‘types’ have in common? (subquestion: is there such a thing as a creative ‘type’- are there typeS?) Are genes that influence the development of mental illnesses such as schizophrenia and bipolar also influencing factors commonly found in creative types?
The task: Latent Inhibition

- first discovered in mammals
- Latent inhibition is when a stimulus that has not had any significance in the past takes longer to acquire meaning as a signal than a newer stimulus, e.g., ignoring background noise as meaningful
- LI is affected by many factors, one of the most important of which is context. Context needs to remain the same in the pre-exposure and test phases. If context is changed, LI is severely attenuated. Working-memory is inundated with experimentally familiar but phenomenally novel stimuli, each competing for the limited resources for efficient information processing.

Latent Inhibition Distributions

- Bimodal distributions
- one problem (for the analysis) is that participants scoring “30” shouldn’t have scored at all...
- there seems to be a dead spot around 20, when everyone spaces out... could be an interesting place to investigate...
Carson, Peterson & Higgins 2003
Experimental Results

- Two groups: High Creatives & Low Creatives
- Two experimental conditions: exposed to stimulus and not exposed to stimulus
- Expectation is all preposessed (grey) subjects (if there was no effect) to have high LI scores
- One good question would be: Do higher CAQ scores also have higher IQs?

Eminent Achievers

"The LI scores of the eminent creative achievers (M=11.1, SD=7.6) were significantly lower than the LI scores of the control group (M=19.4, SD=10.5). Whereas control subjects were equally likely to display either high or low LI scores, eminent creative achievers were seven times more likely to have low rather than high LI scores. (Figure 4)"

Role of IQ

- Threshold theory of IQ: 110 being necessary but not sufficient for creative achievement
- 11 of 20 eminent achievers had IQs over 120
- 11 of 20 controls had IQs over 120
- Low LI/High IQ group demonstrated substantially higher CAQ scores than other groups
- Where we regressed LI & IQ scores on the CAQ scores, negative LI scores and positive IQ scores jointly predicted almost one third of the variance in creative achievement scores, R^2=.30, F(2,26)=11.50, P<.001. The LI x IQ interaction was highly significant, p<.001.
Questions.
Work in Progress: Hypotheses & Nulls

- H1: Creative individuals exhibit some of the characteristics of attentional differences that schizotypal individuals exhibit?
- H2: Creative individuals do not exhibit some of the characteristics of attentional differences that schizotypal individuals exhibit.
- H3: Creative individuals exhibit some of the attentional deficits that schizotypal individuals exhibit.
- H4: Creative individuals do not exhibit some of the attentional deficits that schizotypal individuals exhibit.
- Q: Are there attentional differences behaviorally the same? If so, are they a matter of degree?
- Q: To do think of ways to disentangle IQ confounds from creativity achievements?
- Q: What do the subjects that do not accomplish the test phase of the U task, how many can report hearing white noise at all? How many do recall? How many hear it but don’t semantically process it?

For reference: the SPQ