Personality and Arousal
An example of a research problem

background to Experiment 2

Testing personality theory by examining the interaction of subject variables and situational variables

Experiment 2: Overview

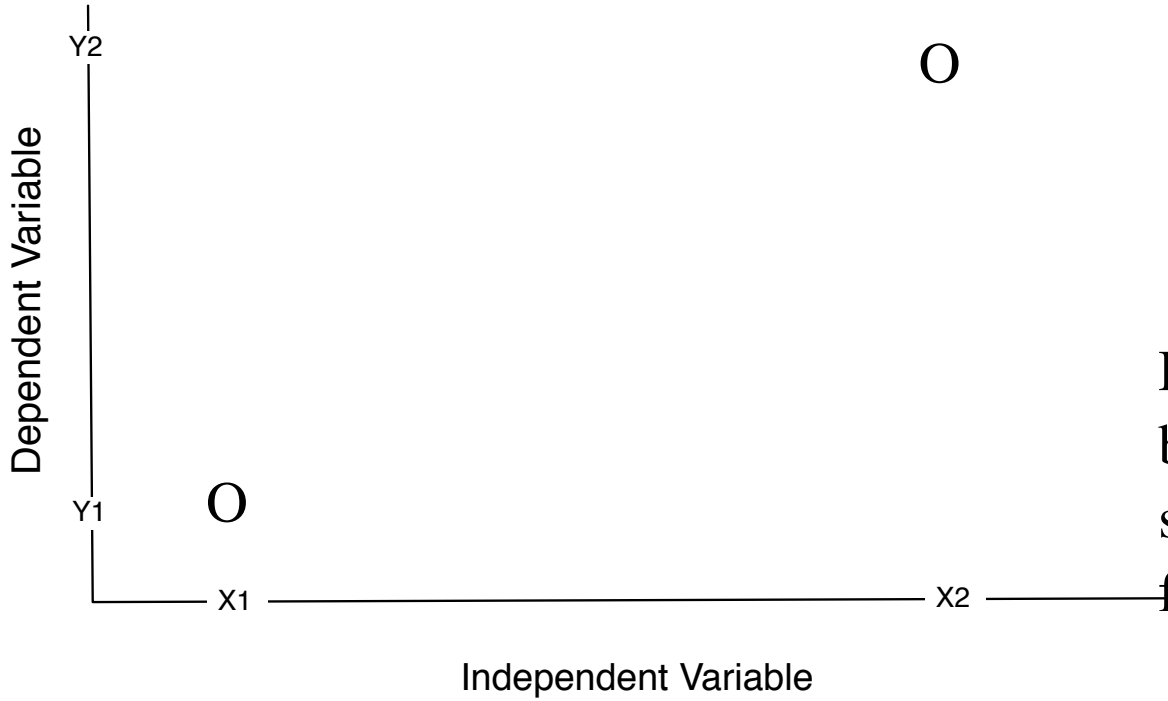
- Personality differences as subject variables
- Types of relationships between Independent Variables and Dependent Variables
- Prior work on personality and performance
- Simulation study

Types of relationships and research designs

Types of relationships and research designs

- Univariate
  - monotonic
  - linear
  - non-monotonic
- Multivariate
  - additive
  - interactive

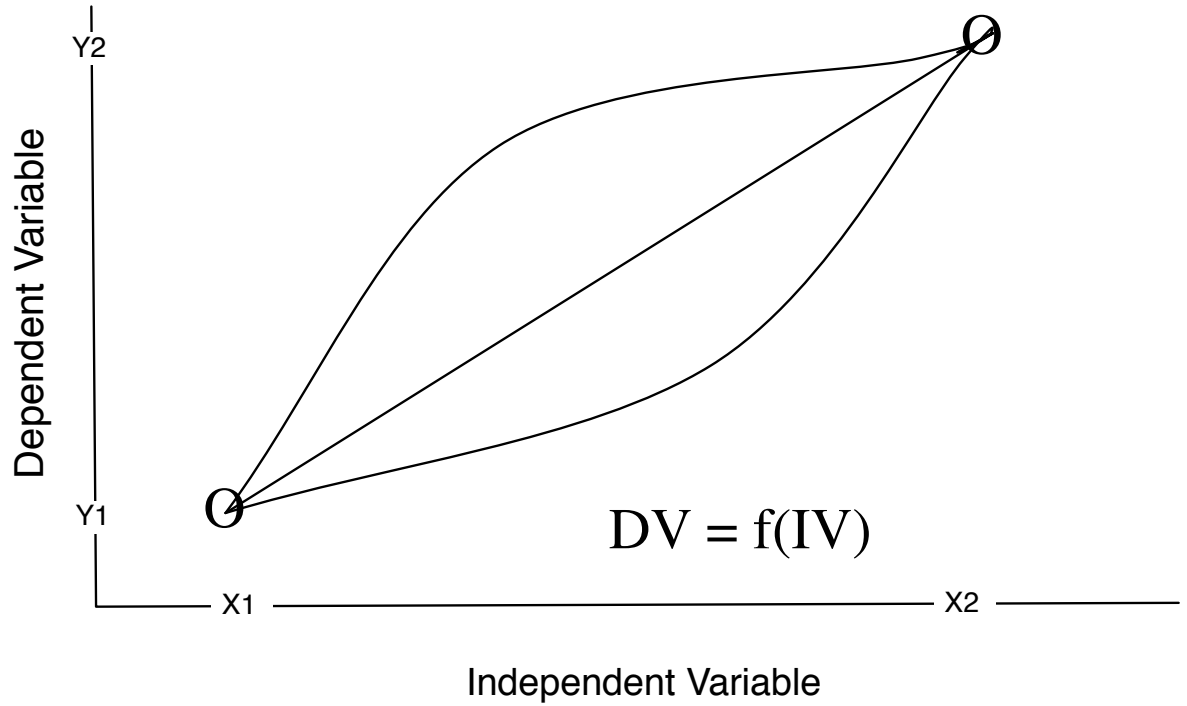
One factor designs: determining the shape of effects



DV = f(IV)
but what is the shape of the function?

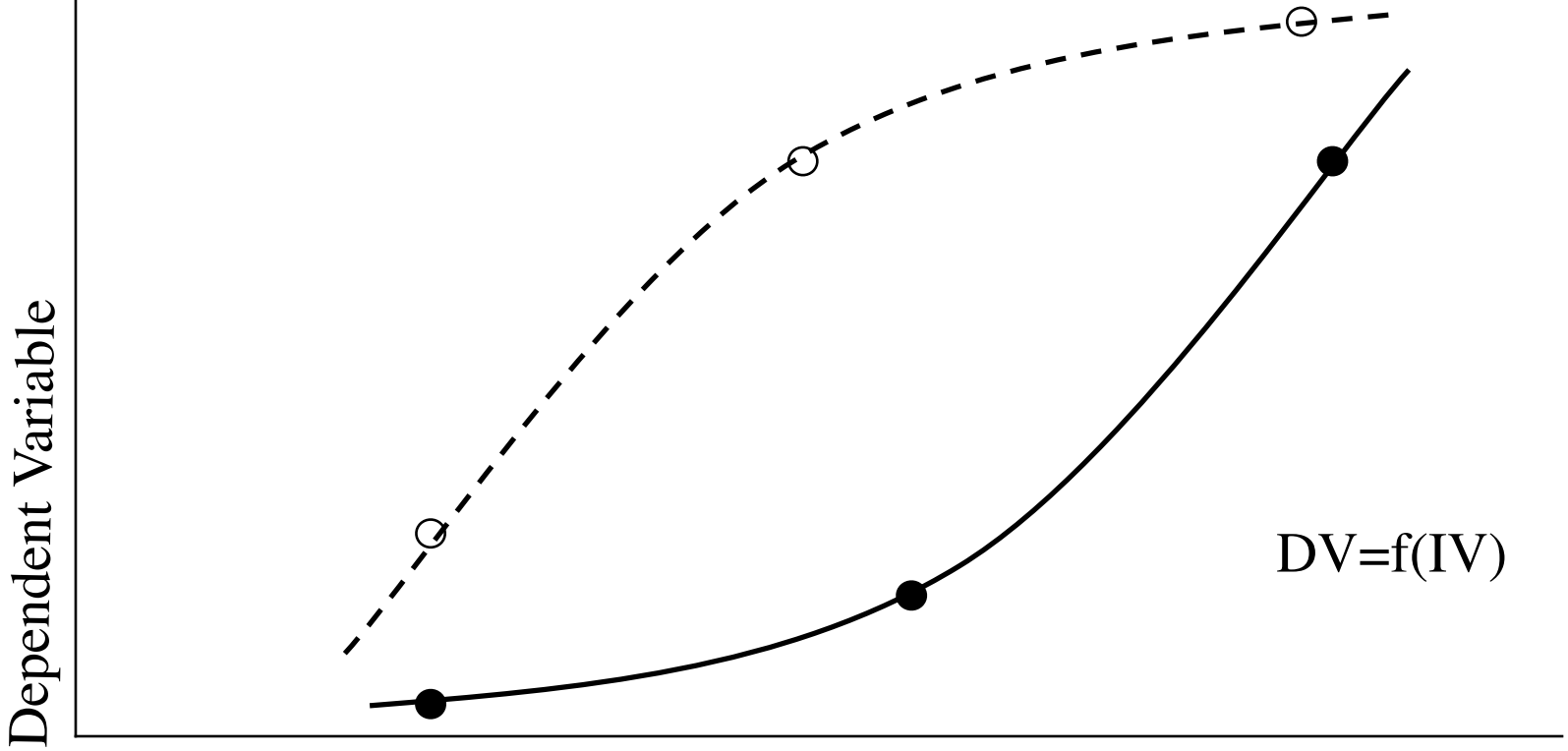
Requires two data points to determine sign of relationship, more to determine shape

One factor designs: determining the shape of effects



Requires two data points to determine sign of relationship, more to determine shape

One factor designs:
Monotonic effects- without inflection

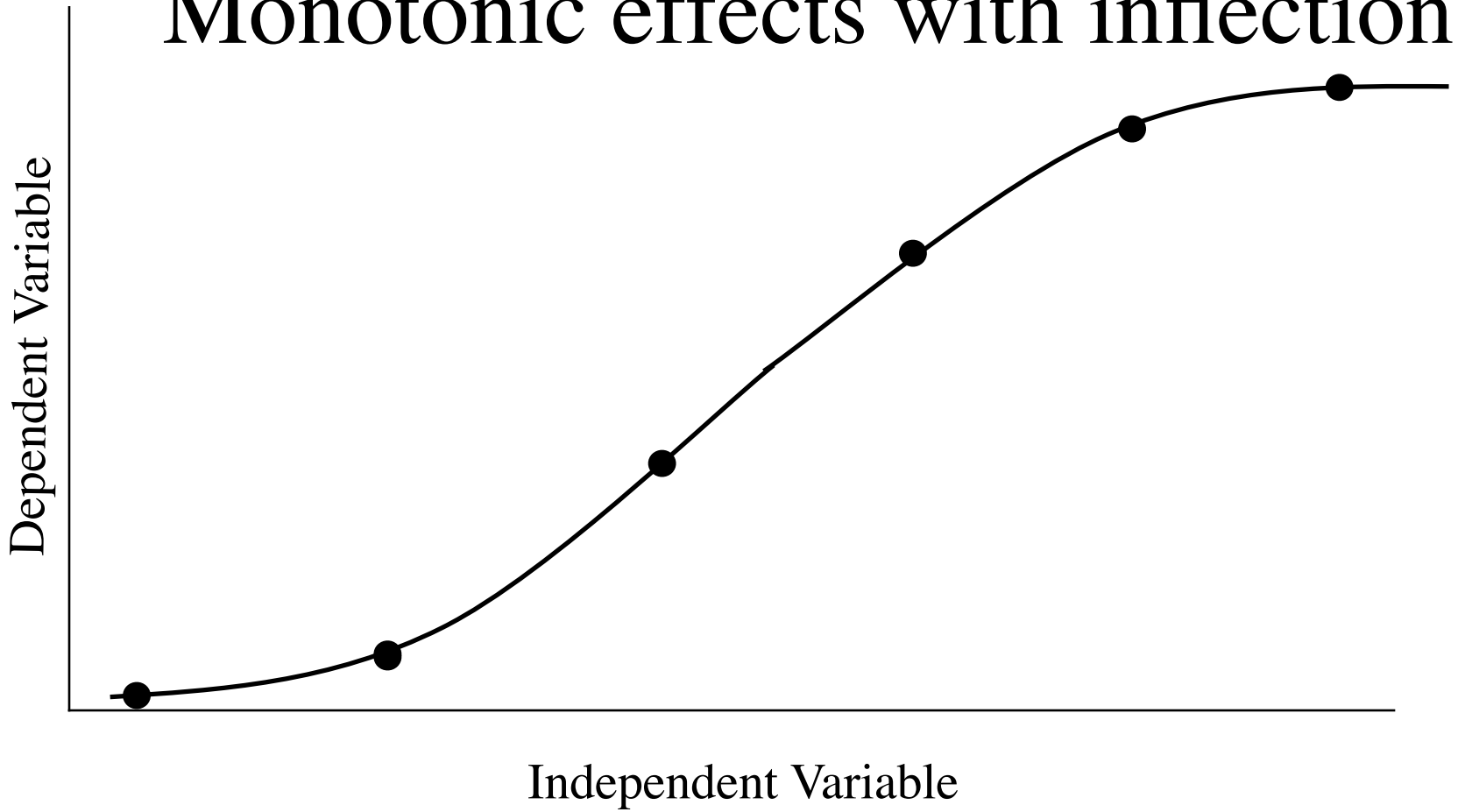


Note that first derivative does not change sign

Accelerating vs. de-accelerating

Requires at least 3 data points

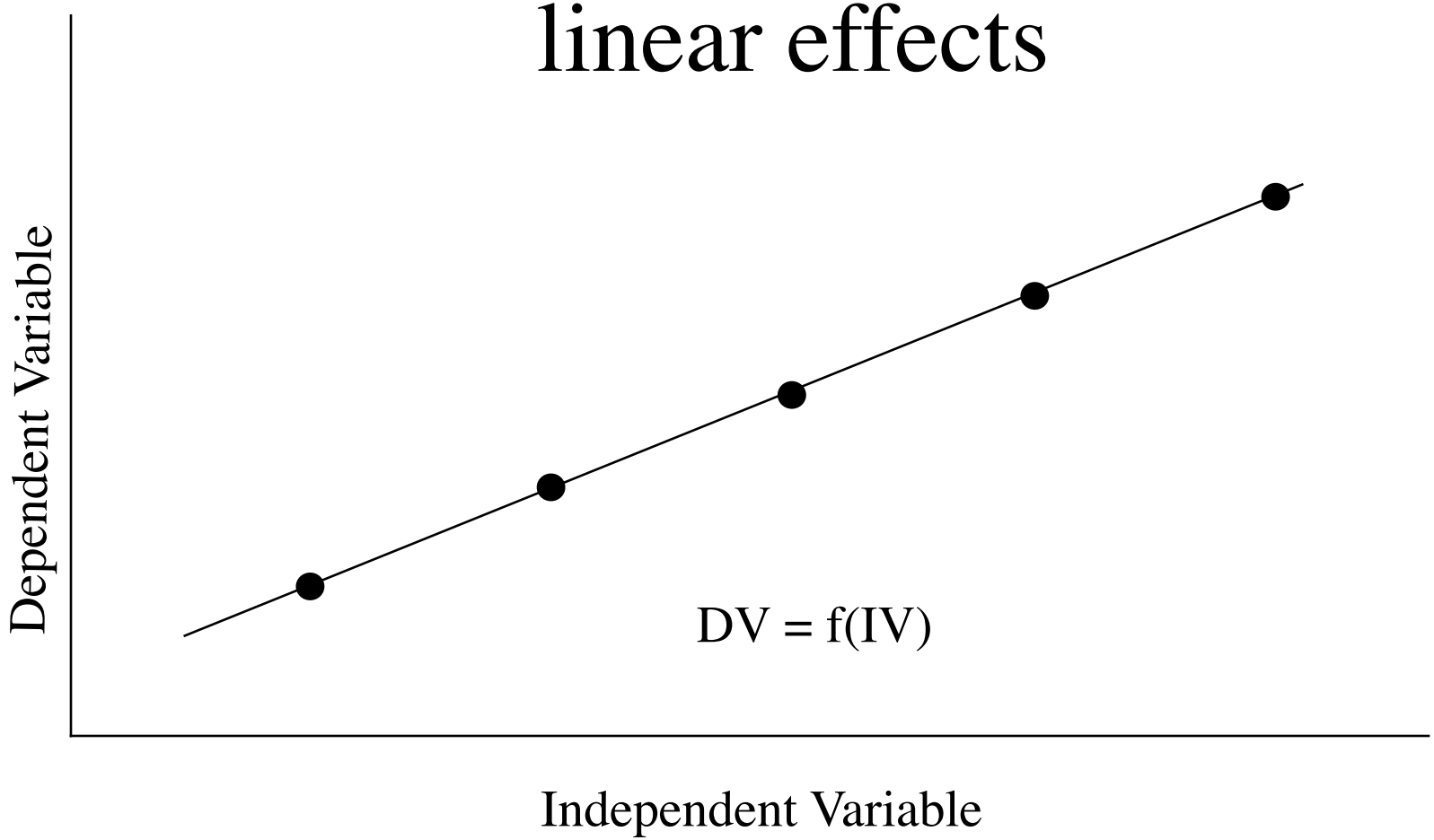
One factor designs: Monotonic effects with inflection



First derivative does not change sign, but second derivative does

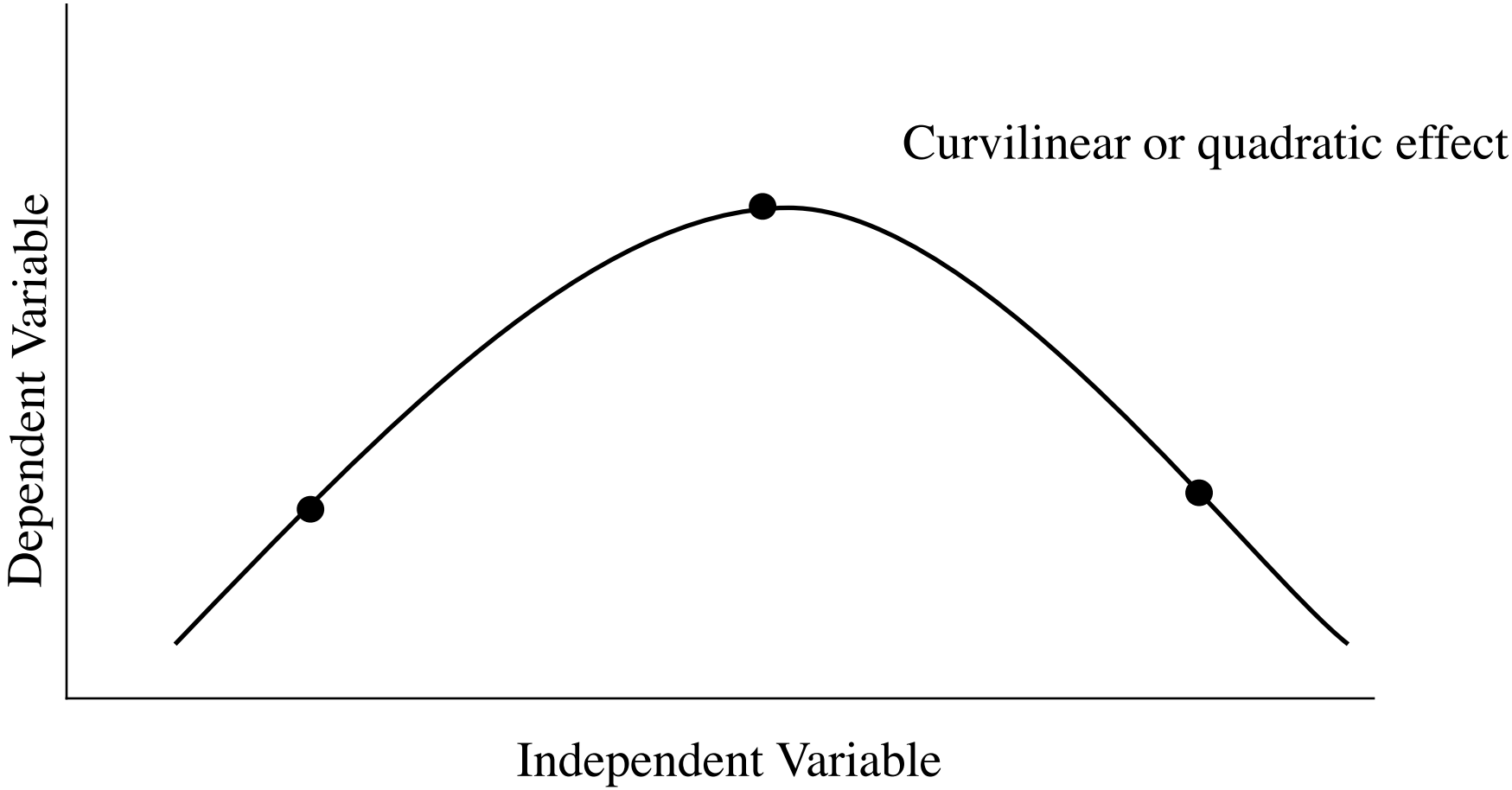
"if first or second derivative changes sign is a cue for two processes"

One factor designs: linear effects



Requires two data points to determine sign of relationship, more to determine shape

One factor designs

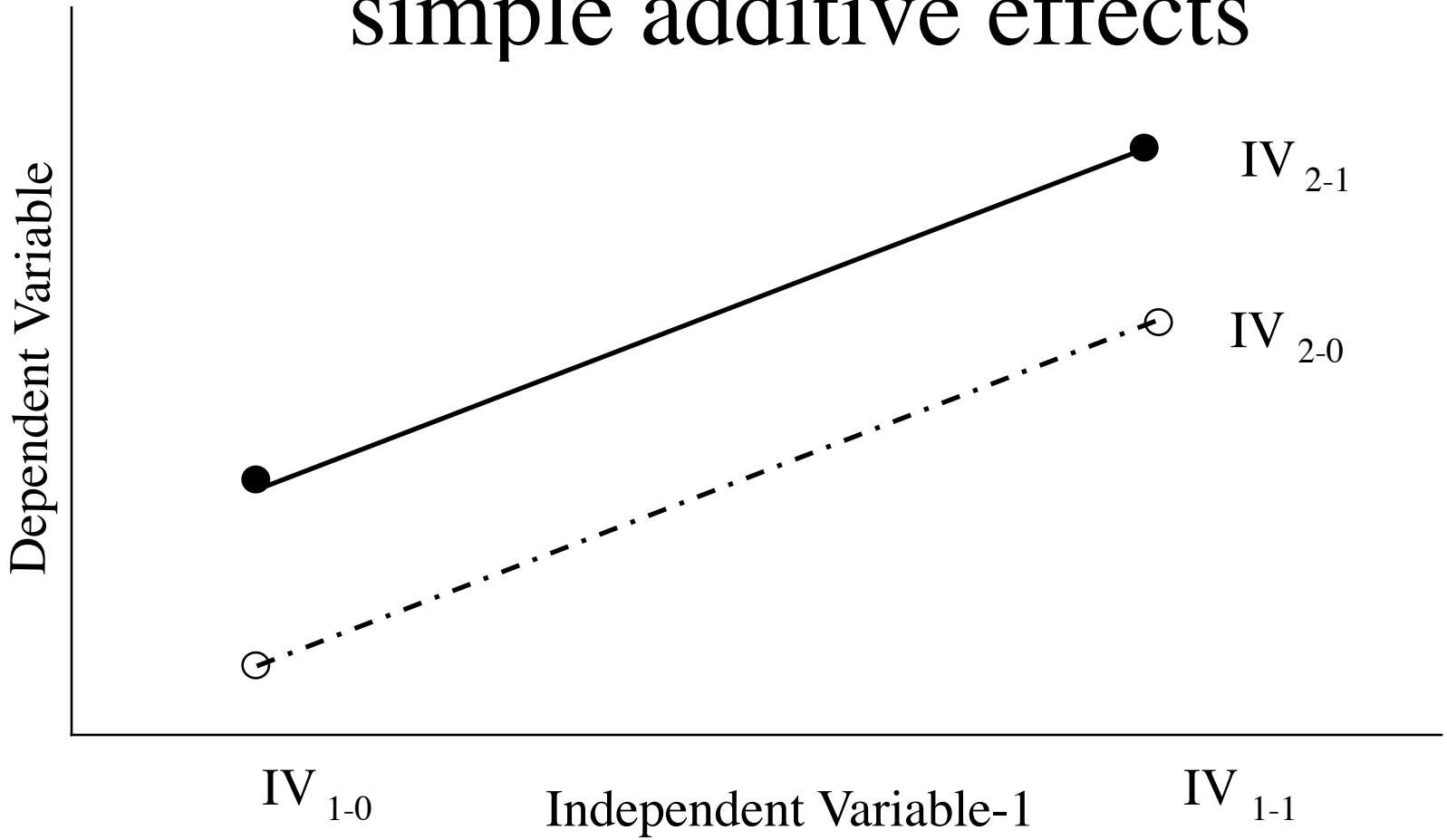


First derivative changes sign, but second derivative does not

"if first or second derivative changes sign is a cue for two processes"

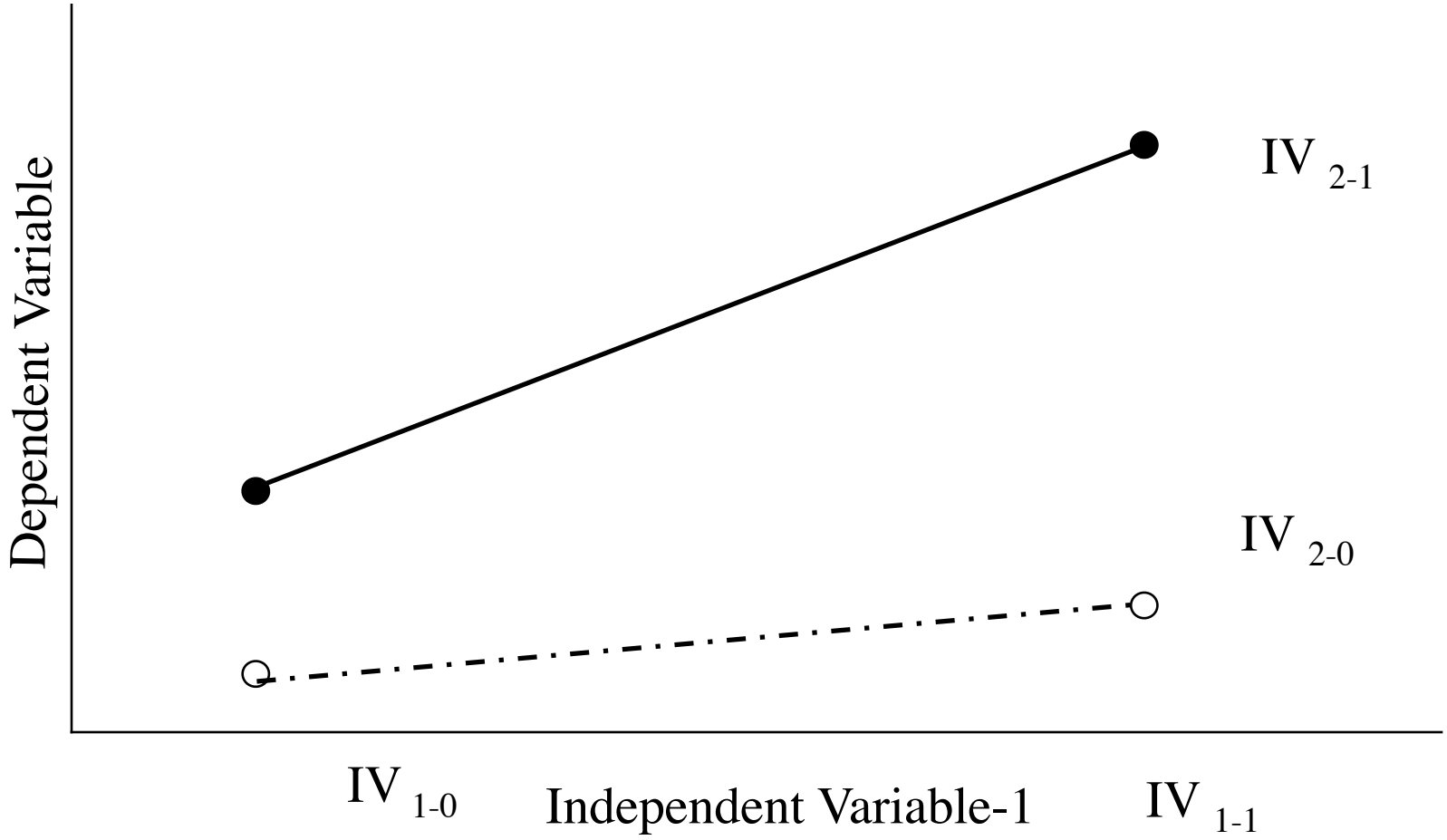
Requires at least 3 data points to determine non-monotonicity

Two factor designs: simple additive effects



$DV = b_1(IV_1) + b_2(IV_2)$

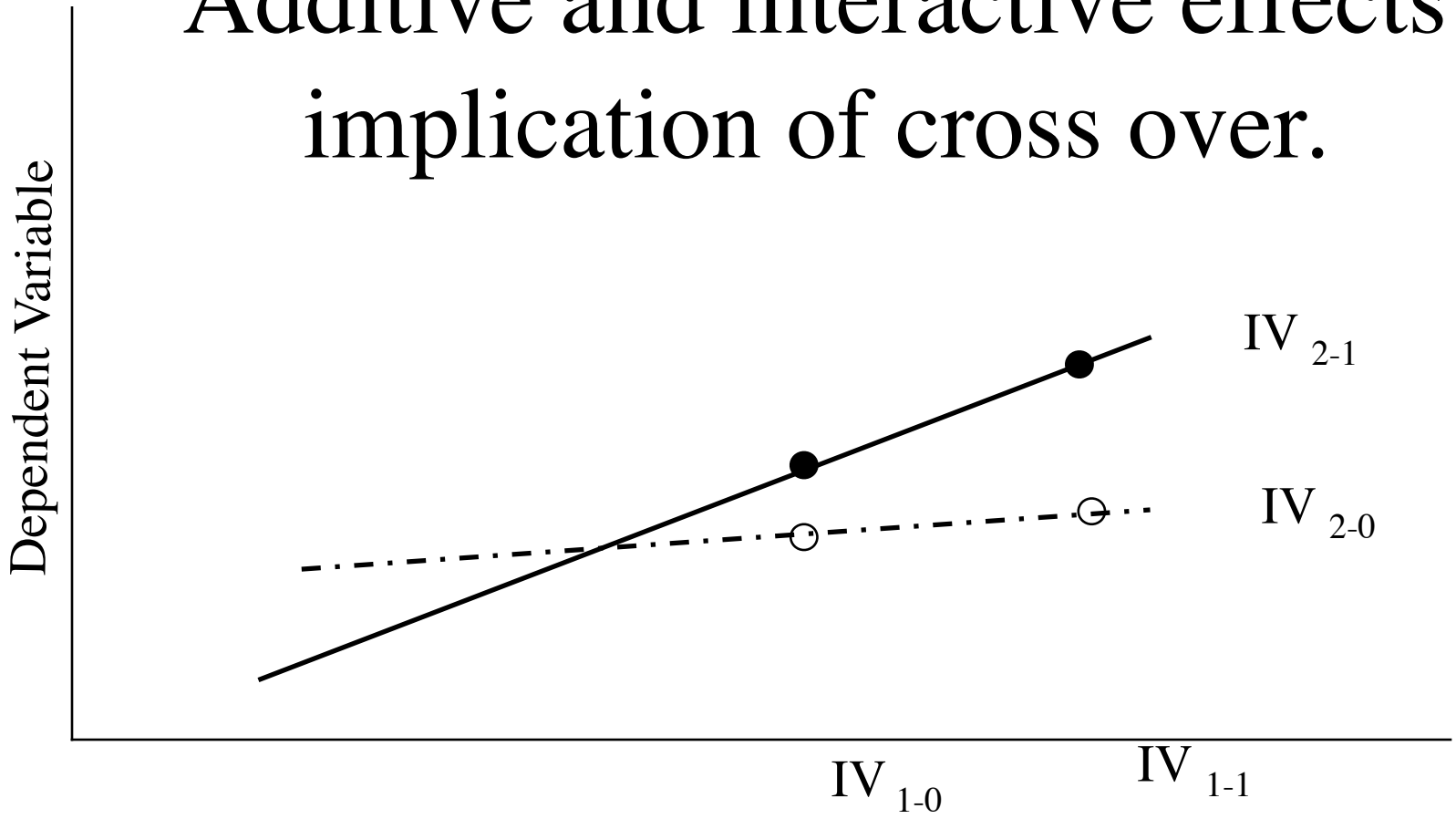
Two factor designs:



$$DV = b_1(IV_1) + b_2(IV_2) + b_3(IV_1 * IV_2)$$

But need to consider scaling interpretation (floor/ceiling, etc)

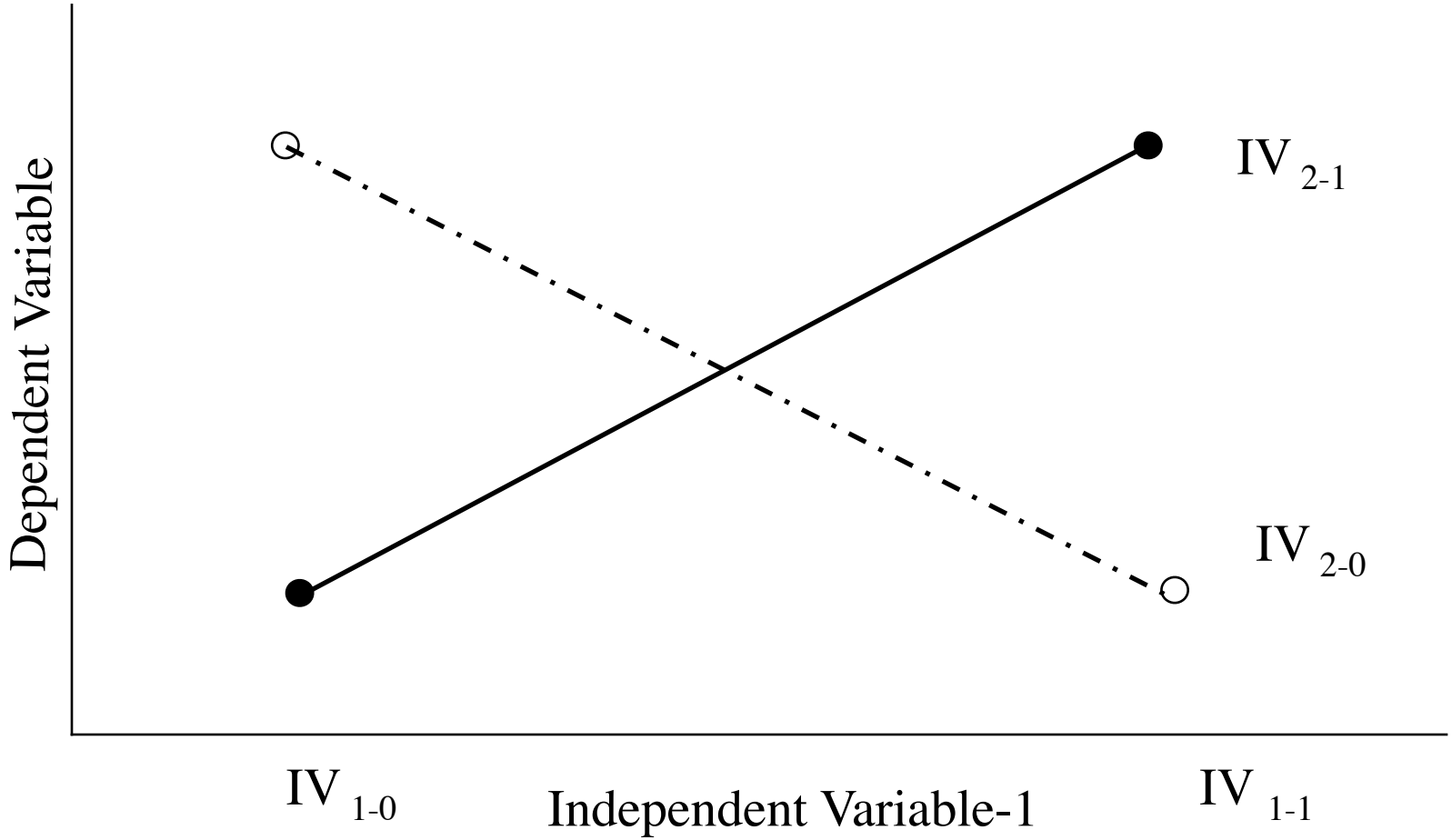
Two factor designs: Additive and interactive effects implication of cross over.



$DV = b_1(IV_1) + b_2(IV_2) + b_3(IV_1 * IV_2)$

But need to consider scaling interpretation (floor/ceiling, etc)

Two factor designs:



$DV = b_3(IV_1 * IV_2)$

Note that neither IV_1 nor IV_2 have direct effects on the DV

Personality and Arousal
An example of a research problem

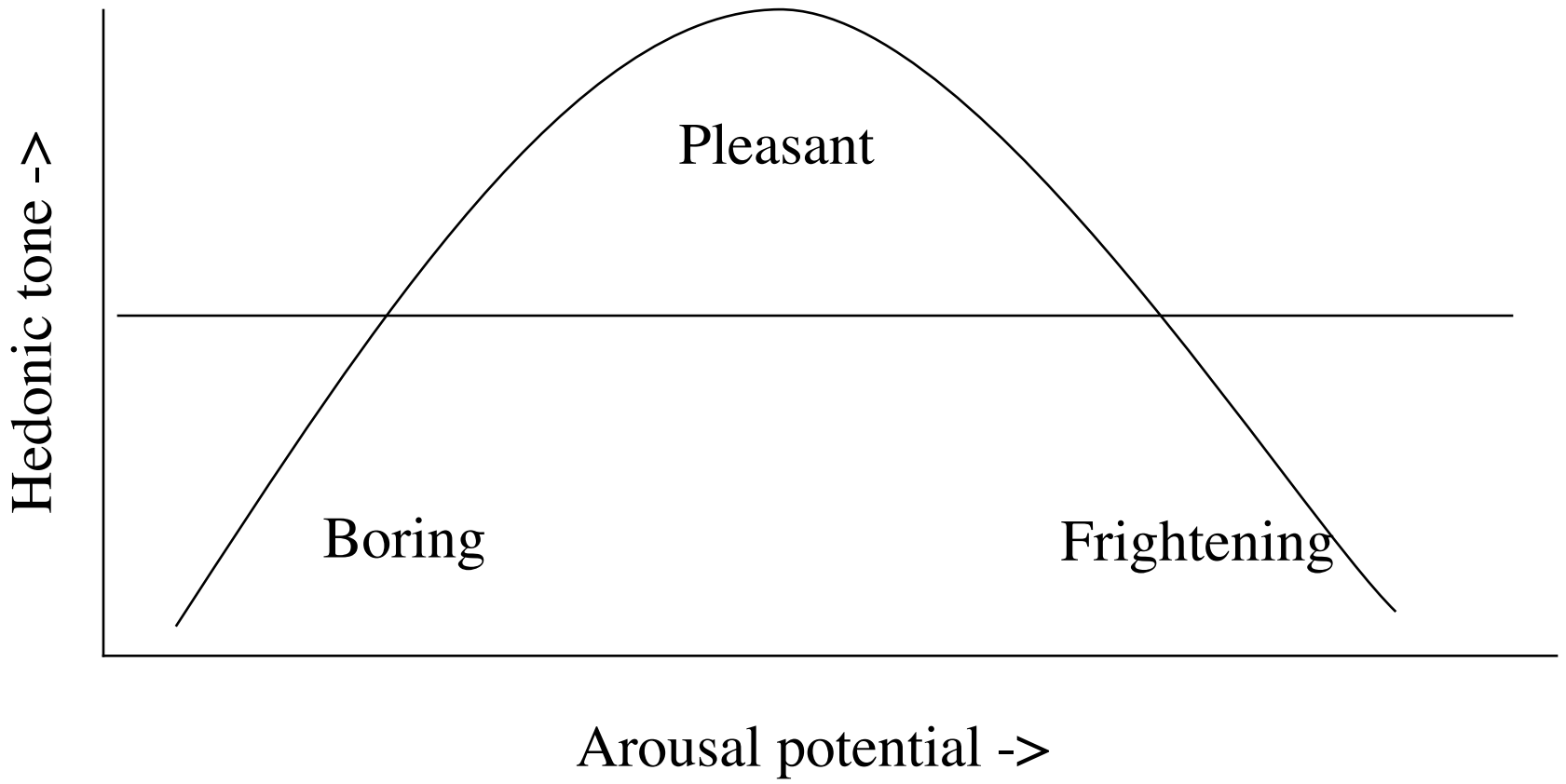
- Motivation and Performance: The Yerkes Dodson Law
  - Explorations in Arousal and Performance
- Personality and Performance
  - Dimensions of Personality
    - Introversion-Extraversion
    - Emotional Stability - Neuroticism
- Arousal and arousal preferences
  - Wundt

Behavioral Consequences of arousal differences

- Differences in Arousal preference
  - Wundt's curvilinear hypotheses
    - Moderate levels of arousal are more pleasing than extreme levels
    - ("the Goldilocks hypothesis")
  - Berlyne
    - Changes in arousal are more pleasing than a steady state
    - Increases or decreases are pleasant

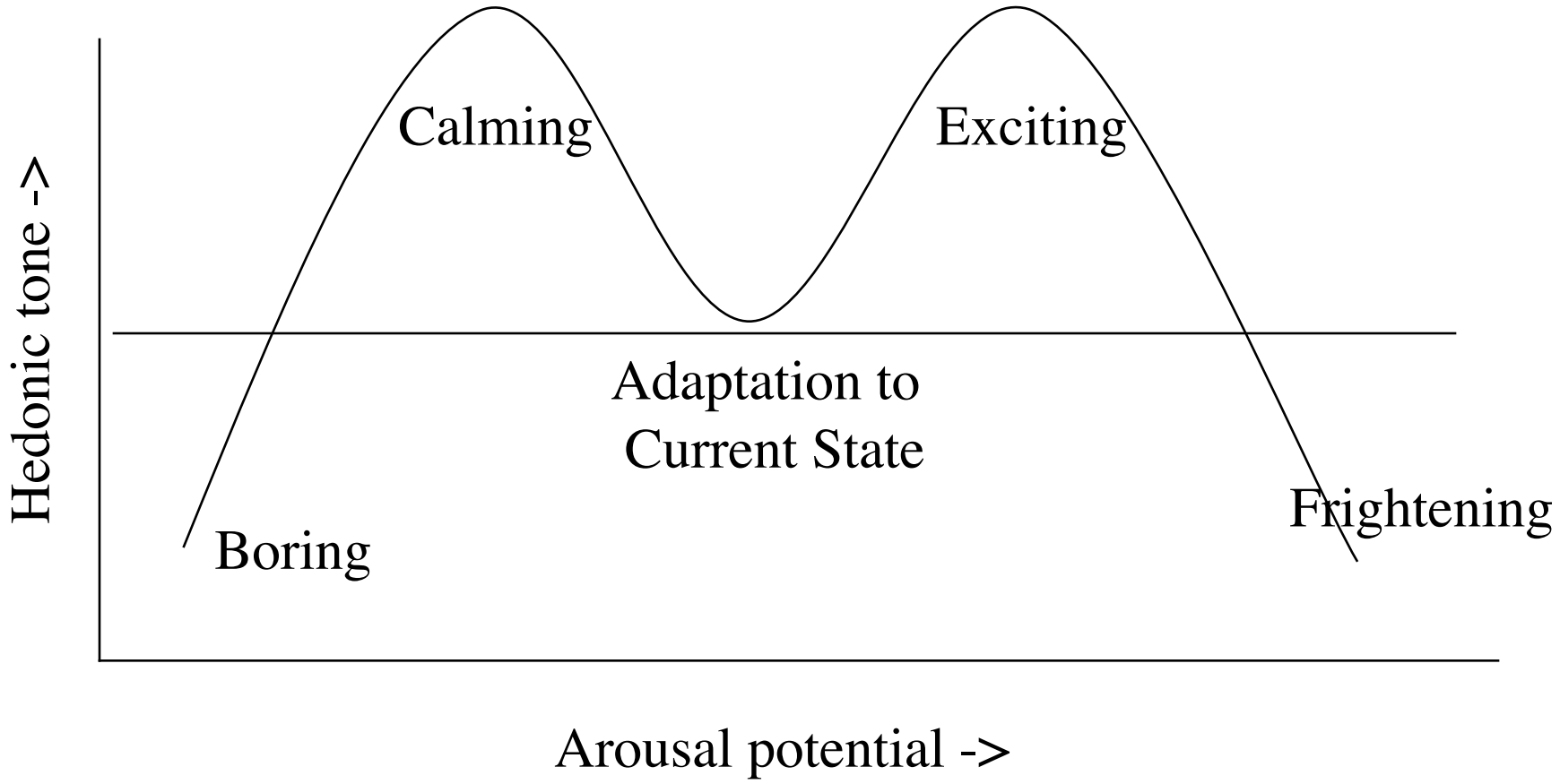
Wundt's hedonic curve

(adapted from Berlyne)



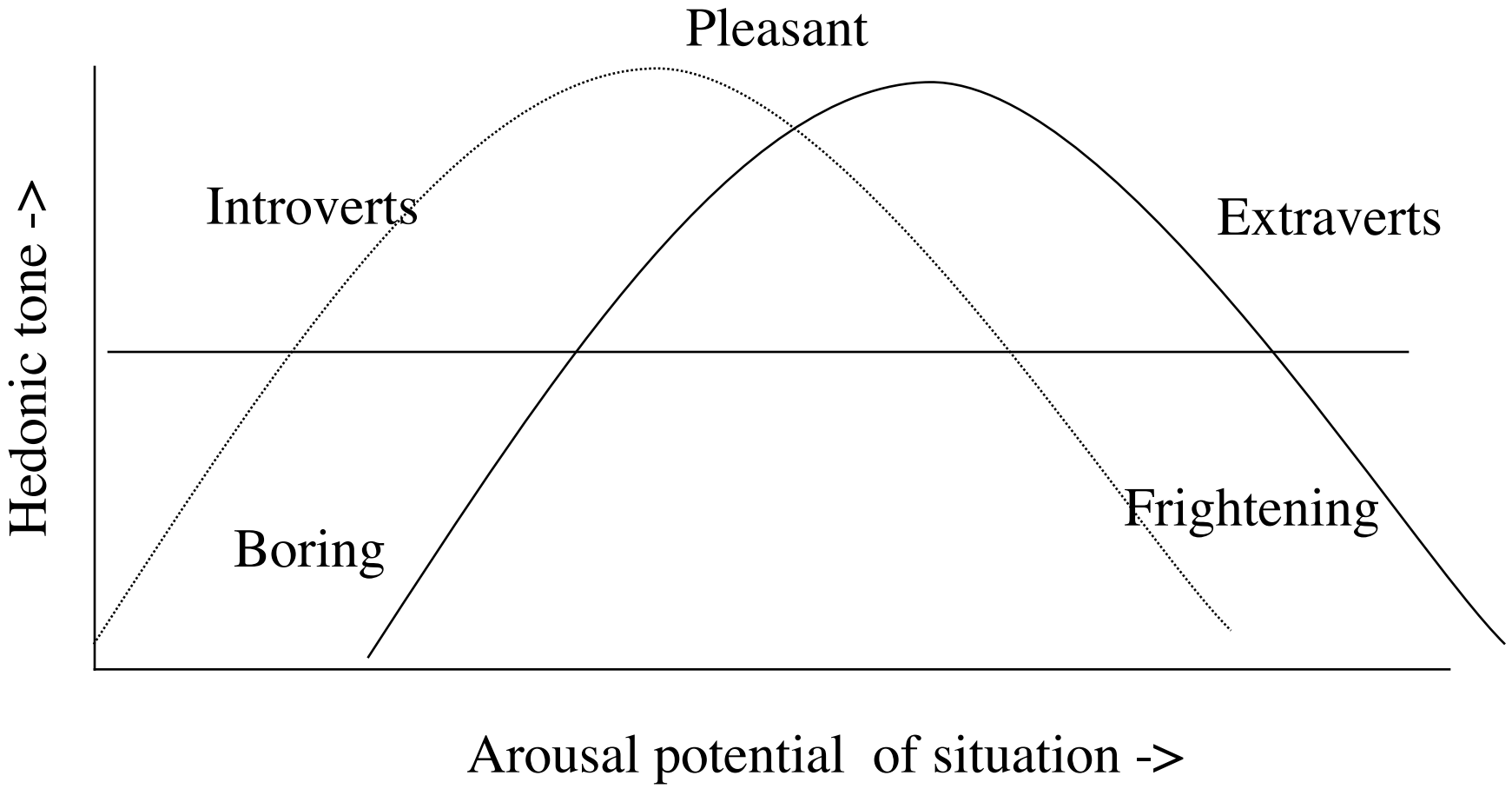
Berlyne's hedonic curve

(adapted from Berlyne)



Wundt's hedonic curve + Individual Differences

(adapted from Eysenck)



Yerkes Dodson “Law”

- Electric shock as drive inducer
  - 4-5 levels of shock
- Discrimination Learning
  - 3 levels of difficulty
- Performance as interactive effect of difficulty and drive
- Interpreted as inverted U relationship between arousal and performance

Yerkes and Dodson, 1908
Discrimination learning

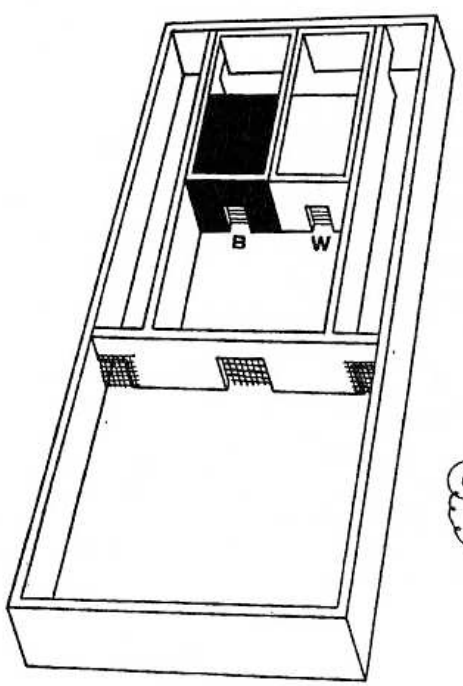


FIG. 1.

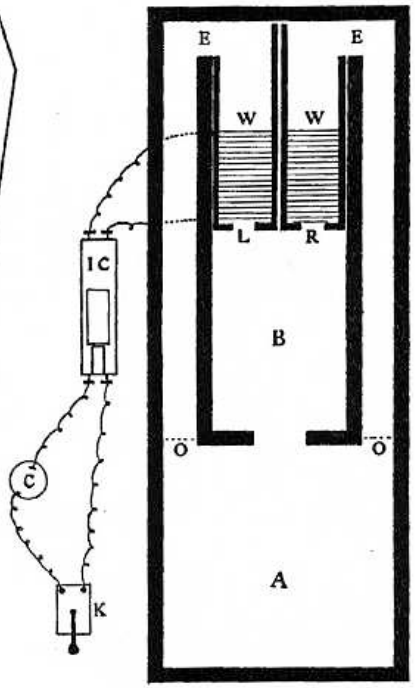


FIG. 2.

FIG. 1. Discrimination box. *W*, electric box with white cardboards; *B*, electric box with black cardboards.

FIG. 2. Ground plan of discrimination box. *A*, nest-box; *B*, entrance chamber; *W W*, electric boxes; *L*, doorway of left electric box; *R*, doorway of right electric box; *E*, exit from electric box to alley; *O*, swinging door between alley and *A*; *IC*, induction apparatus; *C*, electric battery; *K*, key in circuit.

Yerkes and Dodson
Learning and shock level

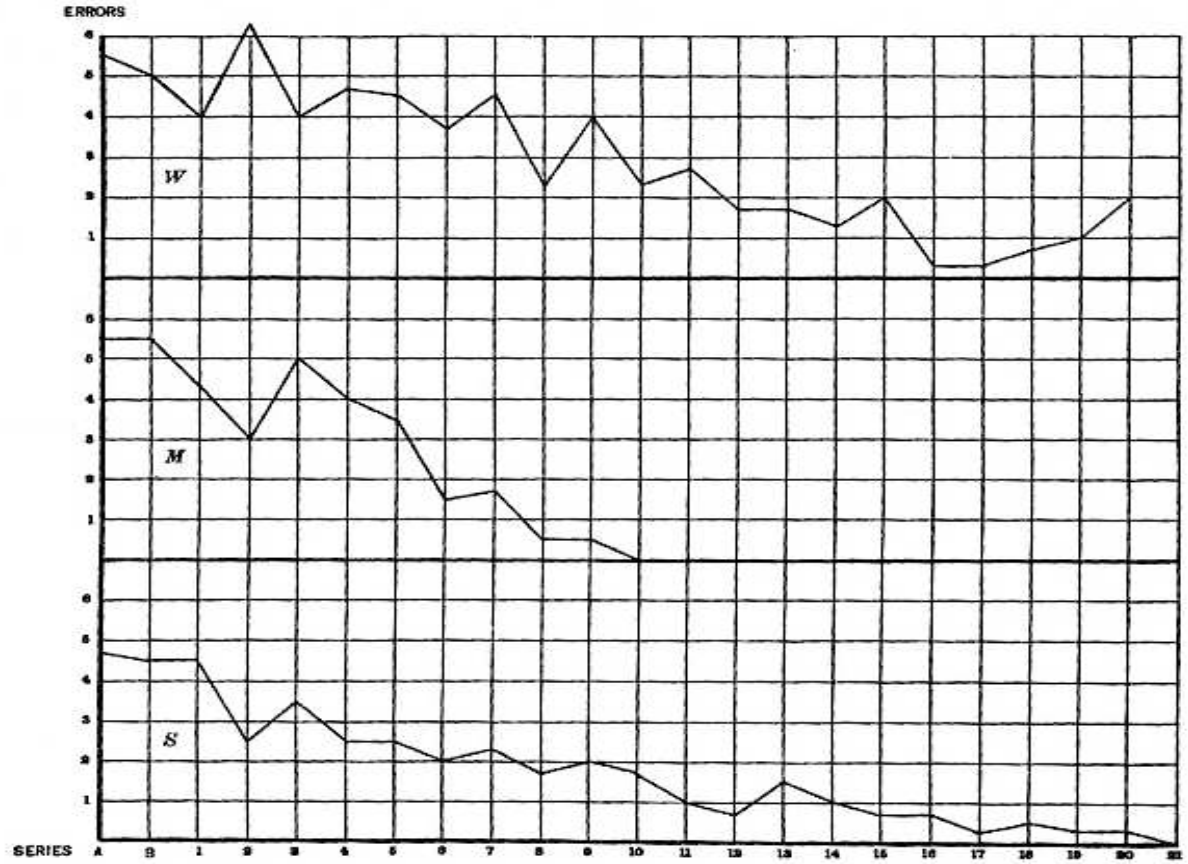


FIG. 4. Curves of learning. Ordinates represent series of ten tests each, and abscissæ represent the average number of errors for four mice in each series. *W*, designates the error curve for the individuals which were trained under the condition of *weak* electrical stimulation; *M*, designates the corresponding curve for the *medium* strength of stimulation; and *S*, that for the *strong* stimulus.

Yerkes and Dodson, 1908

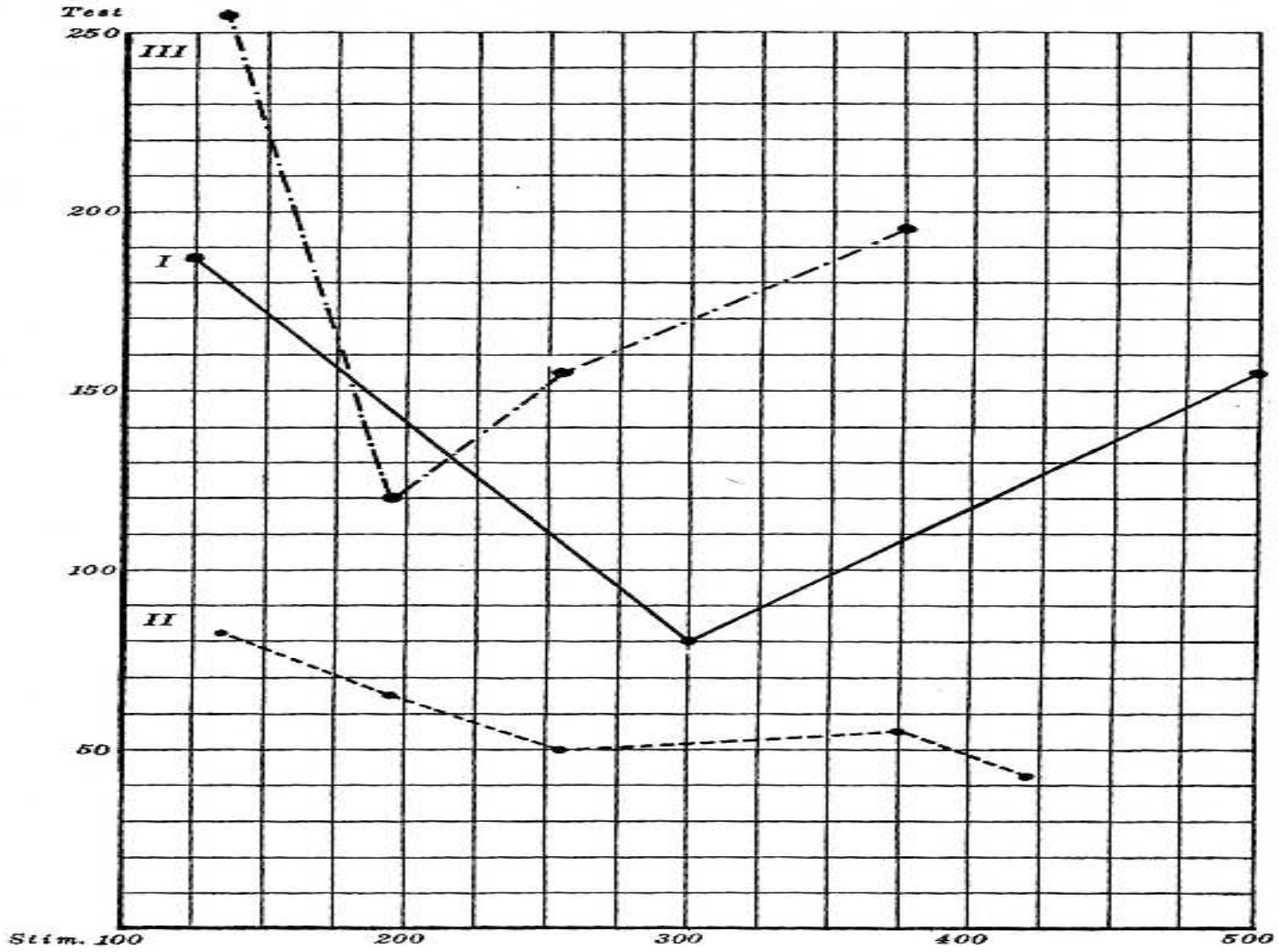
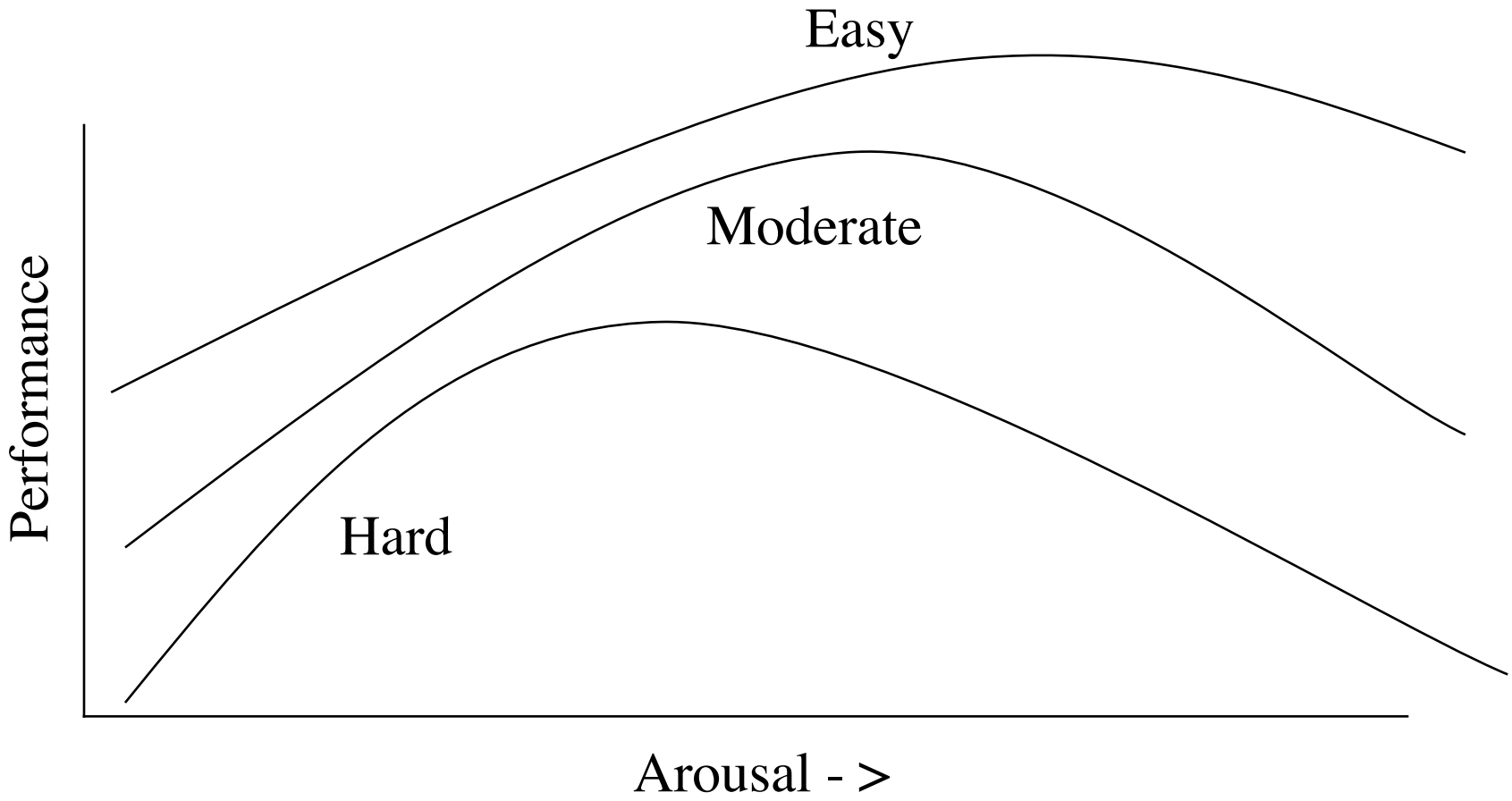


FIG. 5. A graphic representation of the relation of strength of electrical stimulus to condition of visual discrimination and rapidity of learning. Ordinates represent value of electric stimulus in units of stimulation; abscissæ represent the number of tests given. Curve *I* represents the results of the experiments of Set —. Each dot indicates a value of stimulus which was used in the experiments. For example, the first dot to the left in curve *I* signifies that the stimulus whose value was 125 units gave a perfect habit, in the case of the four individuals trained, with 187 tests; the second dot, that for the stimulus value of 300 units 80 tests were necessary; and the third that for the stimulus value of 500, 155 tests. Curves II and III similarly represent the results of the experiments of sets II and III, respectively.

Yerkes and Dodson curve in terms of arousal and task difficulty



Arousal and Performance

- Broadbent and the Applied Psychology Unit
  - Sleep deprivation
  - Noise
  - Stress
- Common theme of arousal
  - Problems with arousal:
    - Is it a unified construct?
    - Arousal of the hand, the heart, the head

Personality and Arousal

- Introvert-Extravert differences map into levels of arousal
  - Introverts perform as if more aroused
  - Extraverts perform as if less arousal
- Eysenck and Arousal theory of I-E
  - Introversion-extraversion and arousal
  - Optimal arousal theory
  - Extraverts seeking to increase stimulation, introverts to reduce it

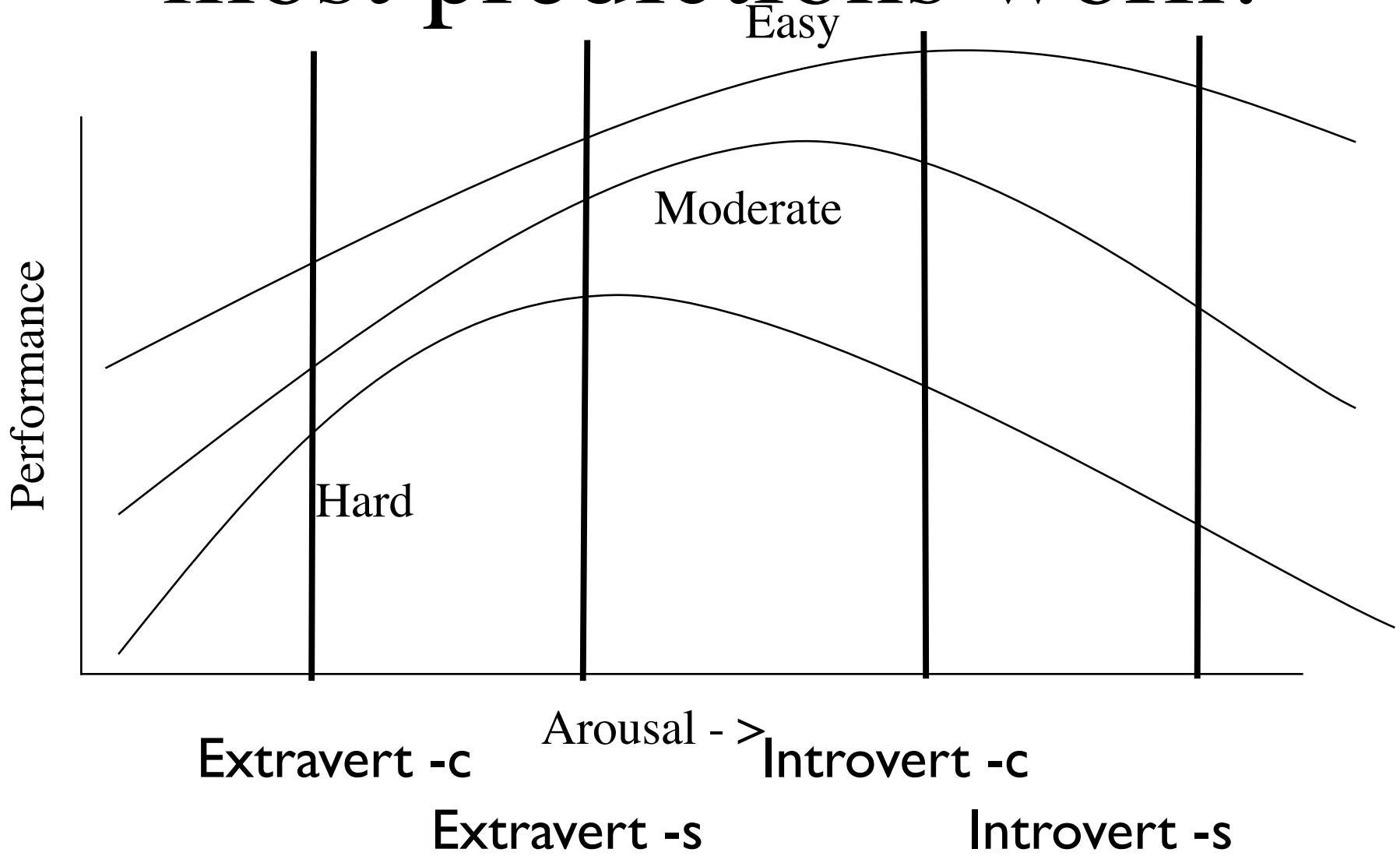
Does Personality make a difference?

- Important Life Criteria
  - Longevity (Friedman et al.)
  - Job Performance (Hunter and Schmidt)
  - Psychological well being
- Laboratory tasks
  - Cognitive sensitivities and biases (eg.,McCloud, Mathews, Matthews, etc.)
  - Systematic pattern of results with cognitive performance by stress manipulations (eg., Anderson, 1990; Anderson and Revelle, 1994; Revelle, Humphreys, Simon, Gilliland, 1980; Revelle, 1993)

Early attempts at theory testing

- Subject variable (Introversion-extraversion)
- Stress manipulation (1 variable)
  - Noise
  - Sleep deprivation
  - Threat
- Predict and observe interaction
- But, 3 out of 4 effects fit theory!

Problem with simple studies most predictions work!



Early attempt at theory testing

- How to manipulate arousal?
  - Presence of others
  - Competition
  - Monetary Incentives
  - Noise

Multiple levels of arousal manipulations

- Combine variables into progressively more arousing
  - Relaxed alone
  - Relaxed together (group size 2)
  - Competing together (group size 2)
  - Competing together for money (group size 2)
  - Competing together for money (group size 8)
  - Competing together for money (group size 8 in noisey room)
- Measurement of arousal using skin conductance

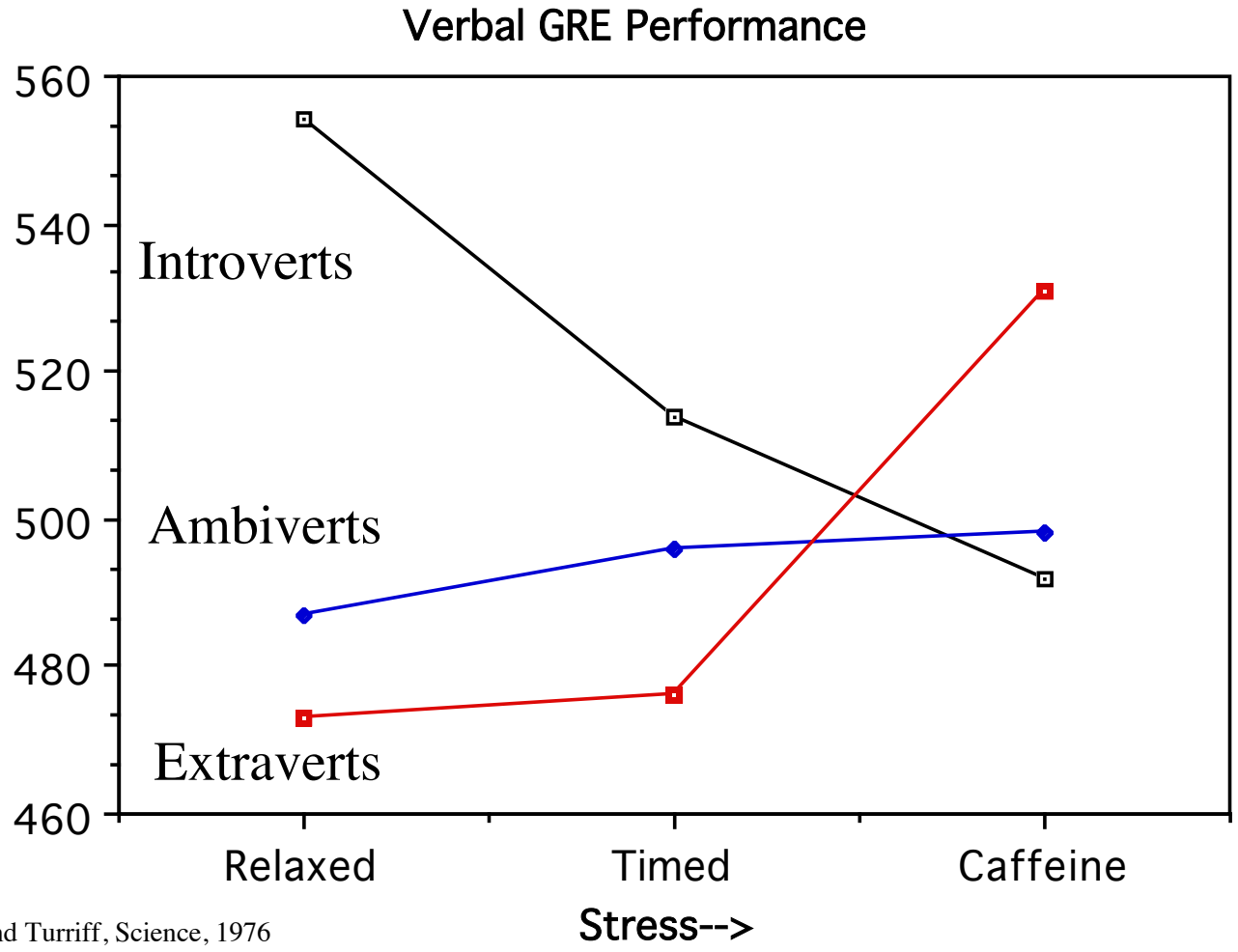
Early attempt

- Prediction of personality by stress manipulation
- With 6 levels of stress, an observed interaction would confirm theory
- Result:
  - Arousal went down as group size went up!
  - Performance went up as incentives increase

Revelle, Amaral and Turriff (1976)

- Introversion-extraversion as assessed by self report
- Placebo-Caffeine to induce arousal
  - 200 mg of caffeine vs. 200 mg of placebo
- Practice Graduate Record Exams
- 3 levels of stress (repeated within subjects)
  - No time pressure
  - Time pressure + placebo
  - Time pressure + caffeine

Introversion, time pressure, and caffeine: effect on verbal performance



Revelle, Amaral and Turriff, Science, 1976

Gilliland's improvement on Revelle, Amaral, and Turiff

- Used new and improved form of the Eysenck Personality Questionnaire (improved from Eysenck Personality Inventory)
- Used 3 levels of caffeine, dosed by body weight
- Used pre-post design

Gilliland does not replicate!

- Complete failure to find result
- post hoc reanalysis on partial set of subjects who had EPI showed the effect was there
- Impulsivity, not Extraversion is critical variable
- but is this data snooping, or a real effect?

Extraversion, Caffeine, and Cognitive Performance

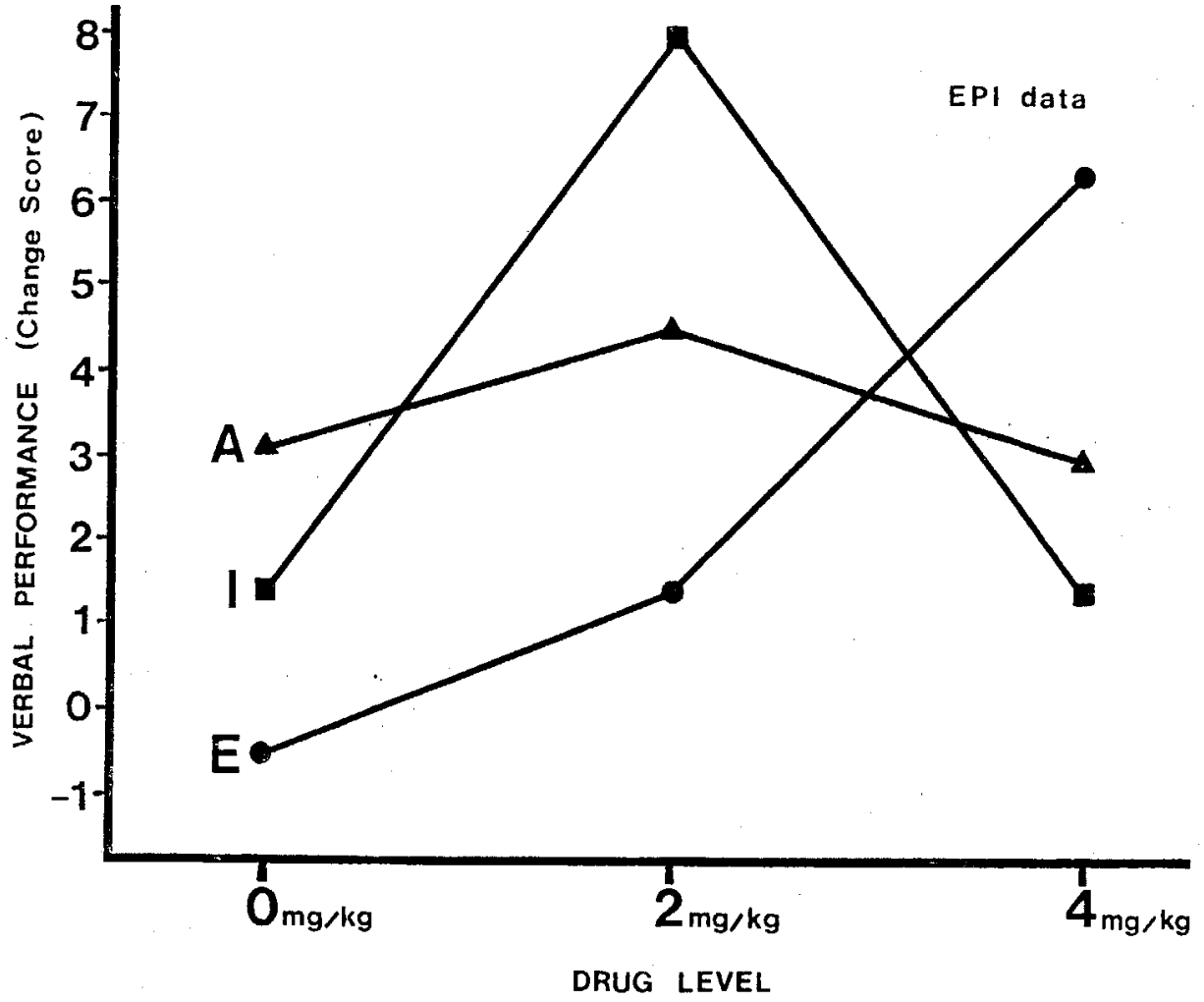


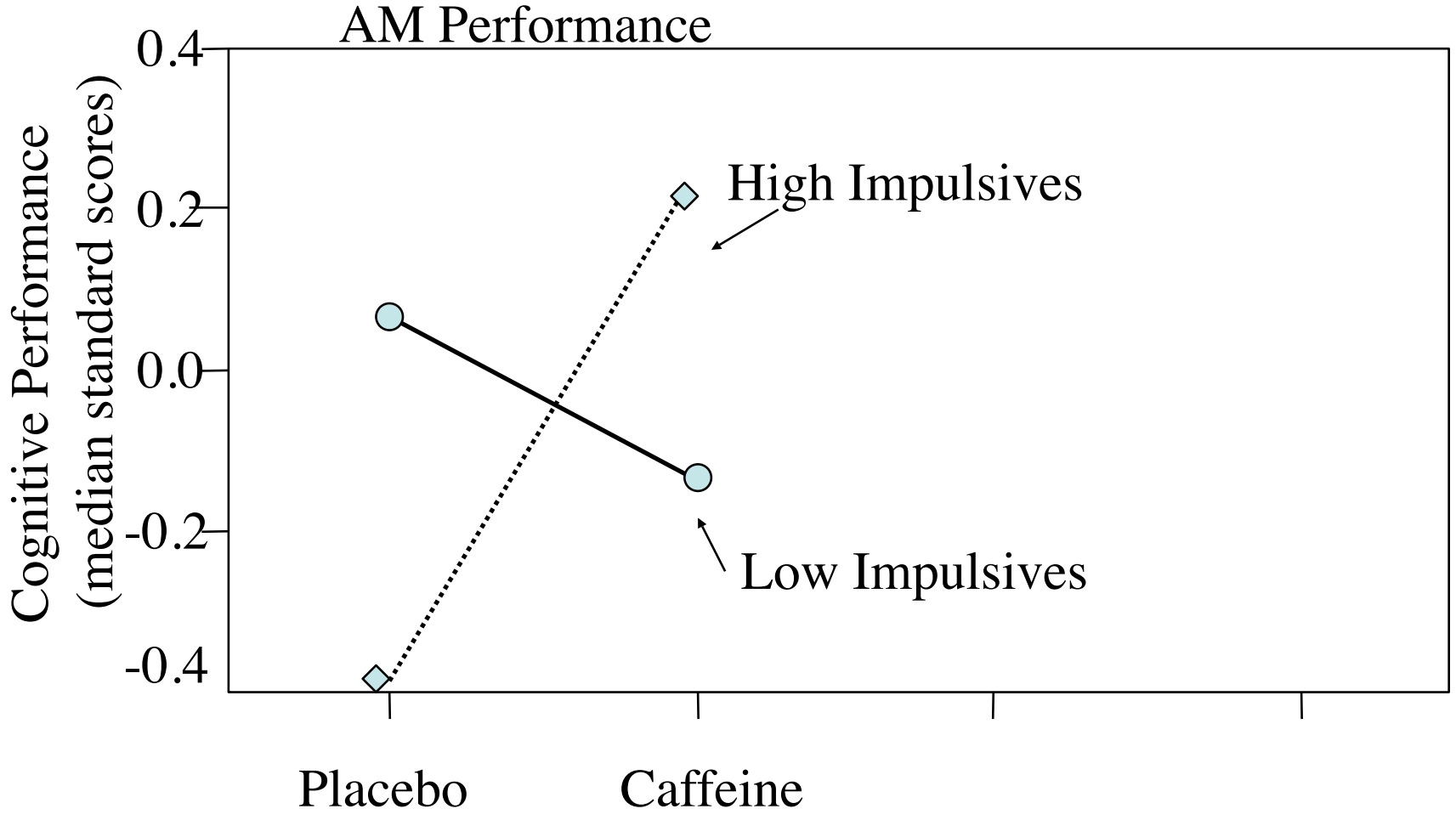
Figure 9. EPI based group means for change in number of items correctly answered on GRE practice tests.

Gilliland, 1976

Many failures to replicate!

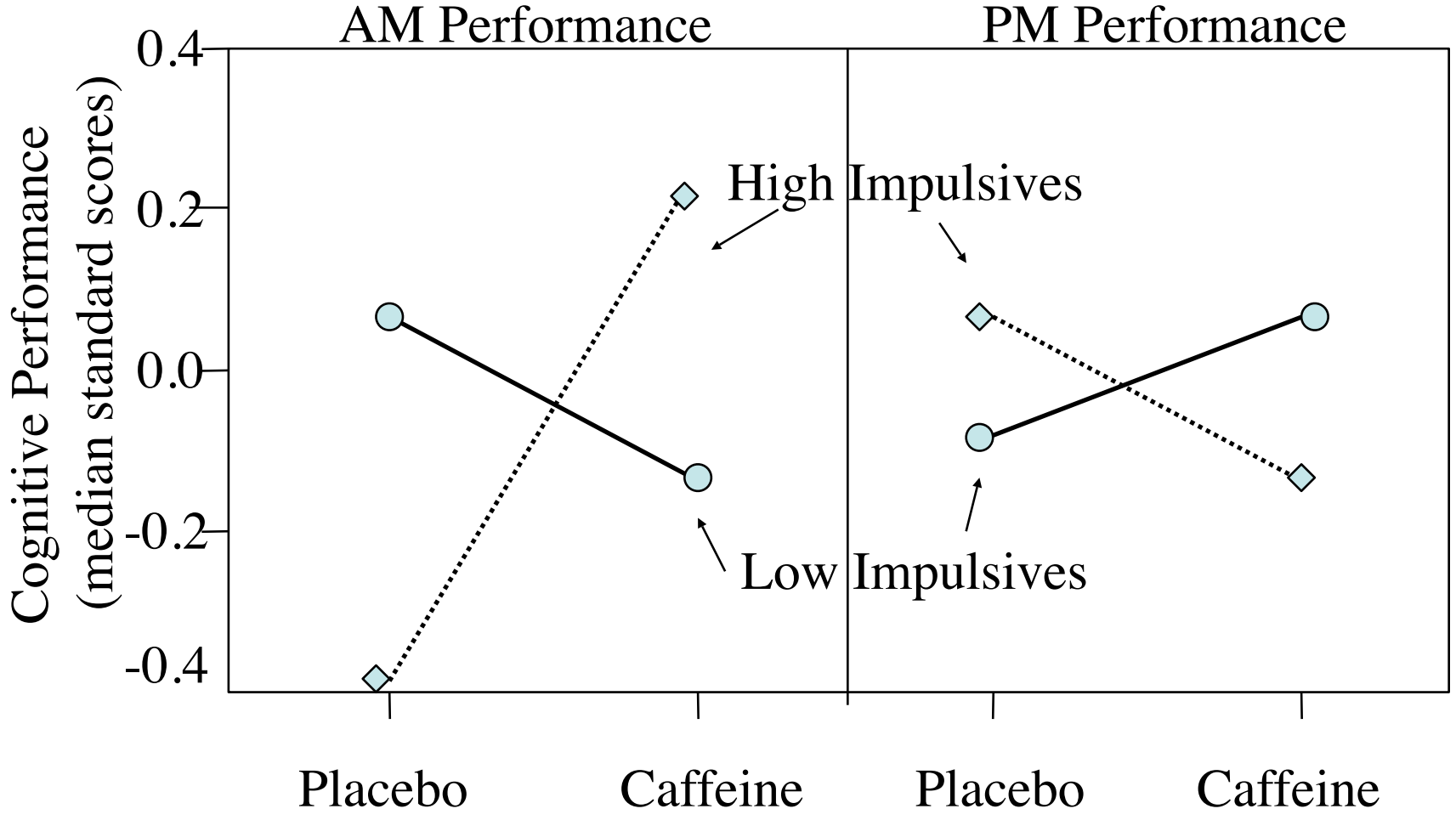
- Results were due to:
  - Adaptation to lab?
    - Theory predicts extraverts should be stimulated when arriving
  - Type of task
    - GREs, math, verbal analogies
  - Incentives of situation?

Impulsivity, Caffeine, and Time of Day: the effect on complex cognitive performance



Revelle, Humphreys, Simon and Gilliland, JEP:G, 1980

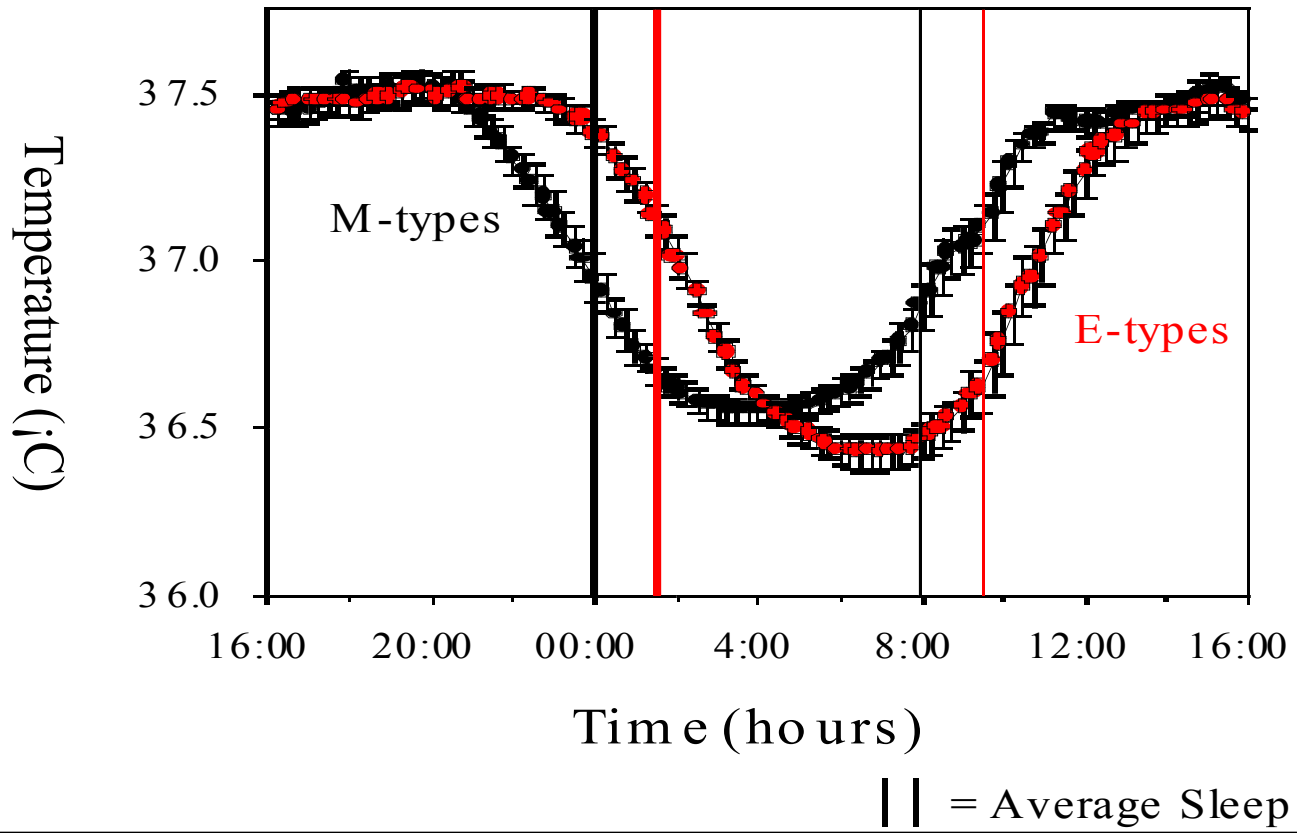
Impulsivity, Caffeine, and Time of Day: the effect on complex cognitive performance



Revelle, Humphreys, Simon and Gilliland, JEP:G, 1980

Morningness/Eveningness and BT

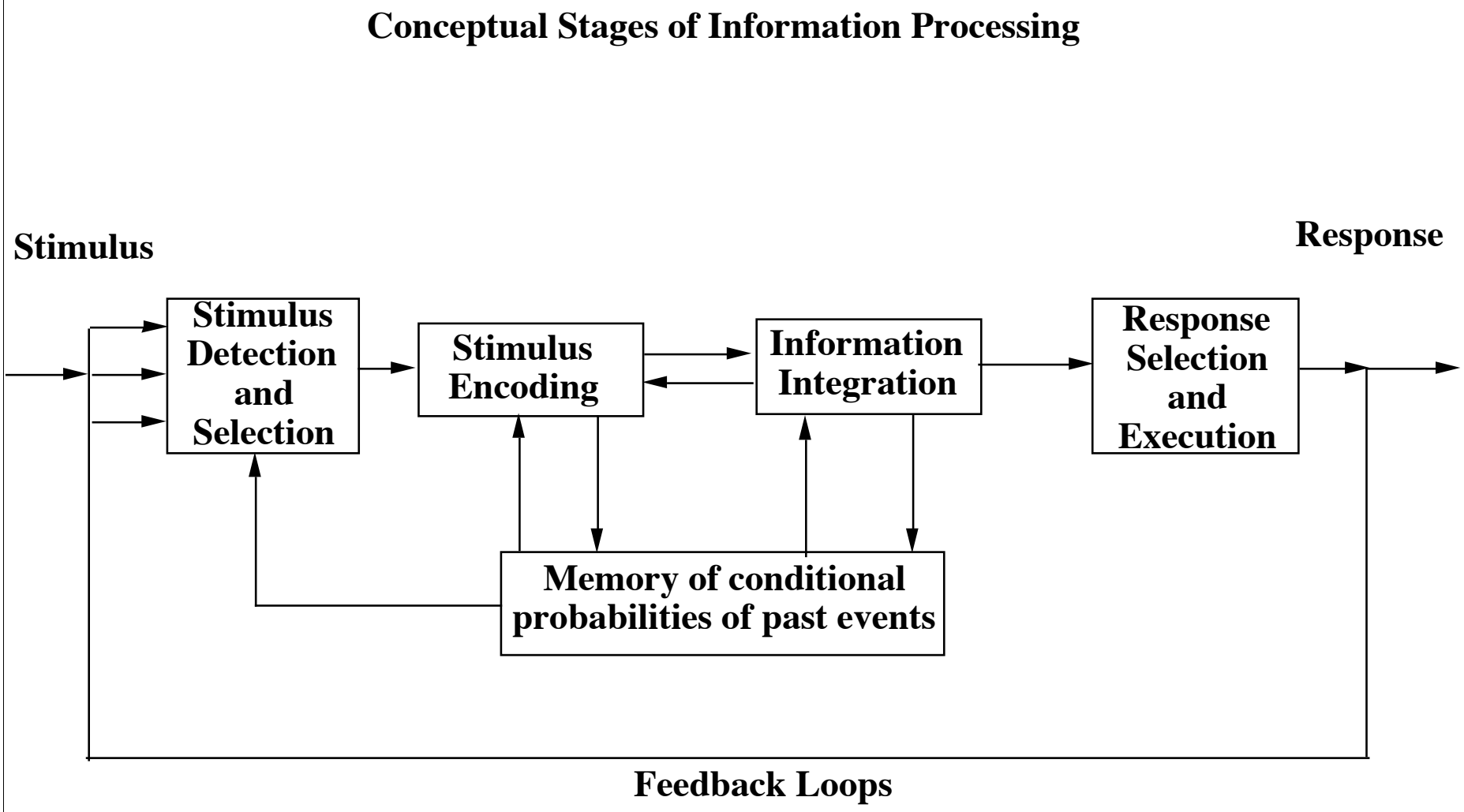
(Baehr, Revelle and Eastman, 2000)



Personality and Cognition: early attempts at a synthesis

- Humphreys and Revelle, 1984
  - Personality Traits x situational cues produce
  - Motivational States (arousal and on task effort)
  - Inverted U between arousal and performance is the result of two processes
    - Arousal facilitates Sustained Information Transfer (SIT) and inhibits Working Memory
    - On task effort facilitates SIT

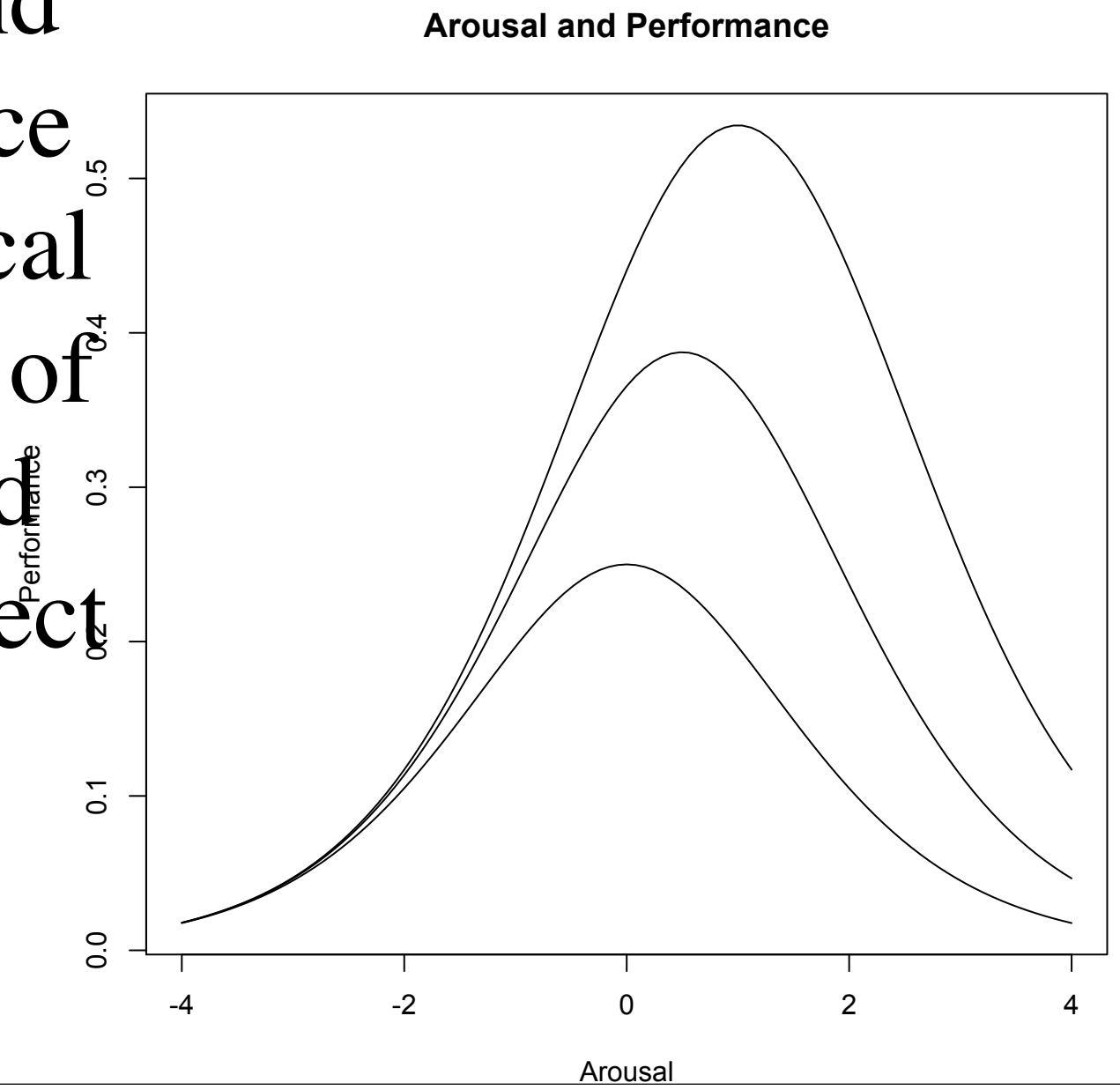
Simple stage model of processing- Personality effects at each stage



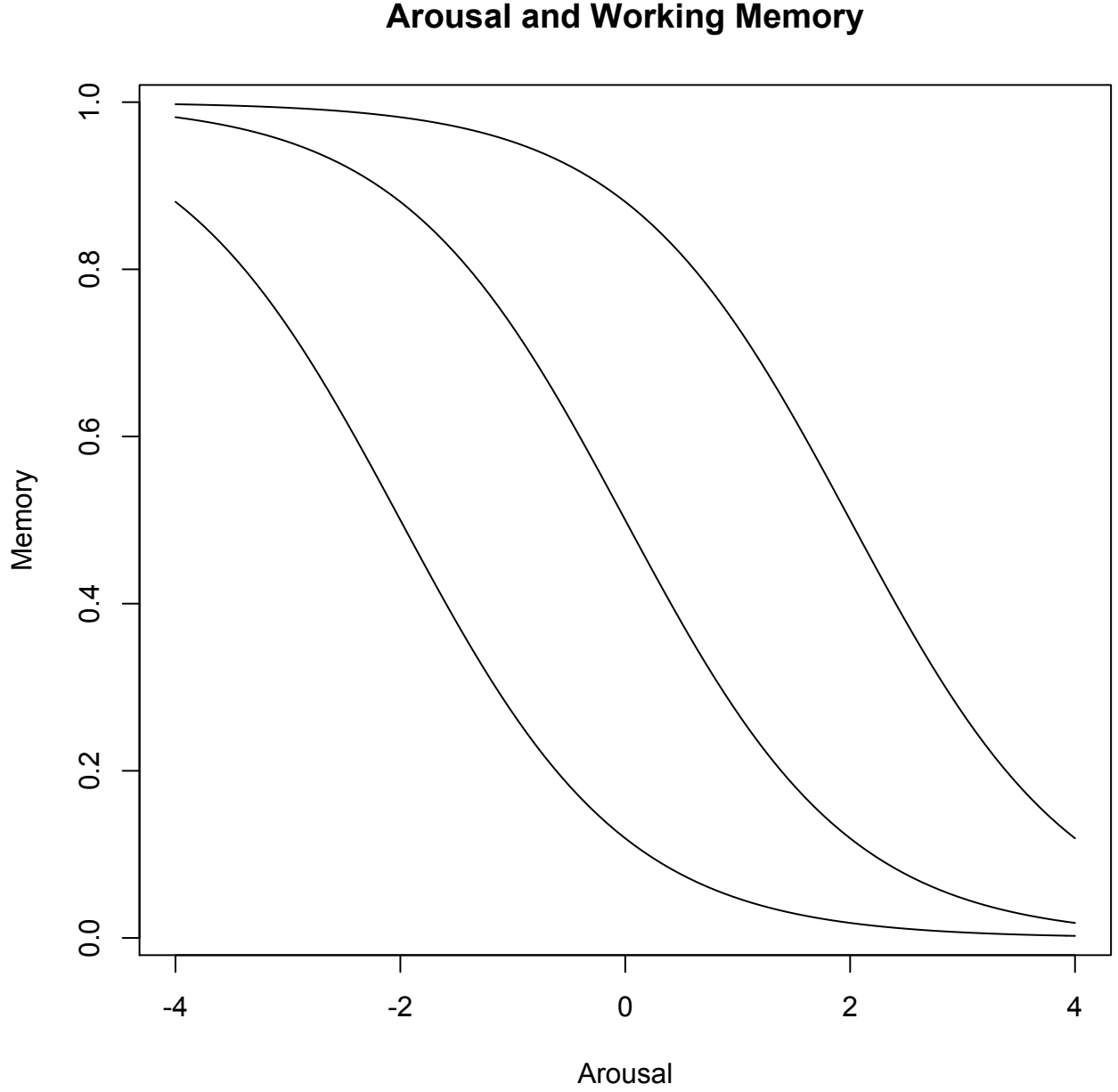
Personality affects each stage of processing

- Introversion facilitates detection in vigilance tasks
- Anxiety facilitates detection of threat terms
- Depression facilitates memory for negative events
- Intelligence facilitates processing speed

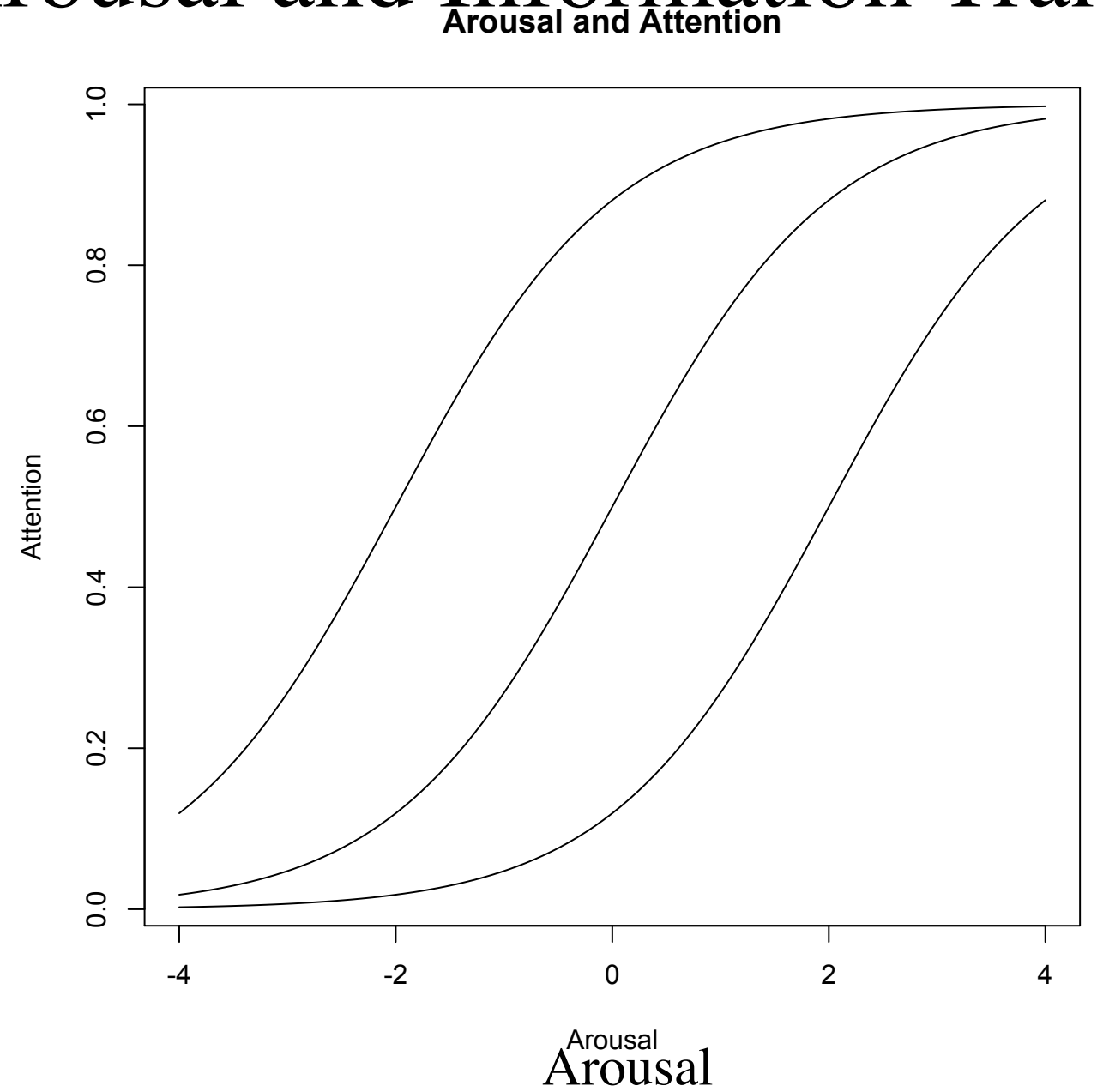
Arousal and Performance (Hypothetical description of Yerkes and Dodson Effect



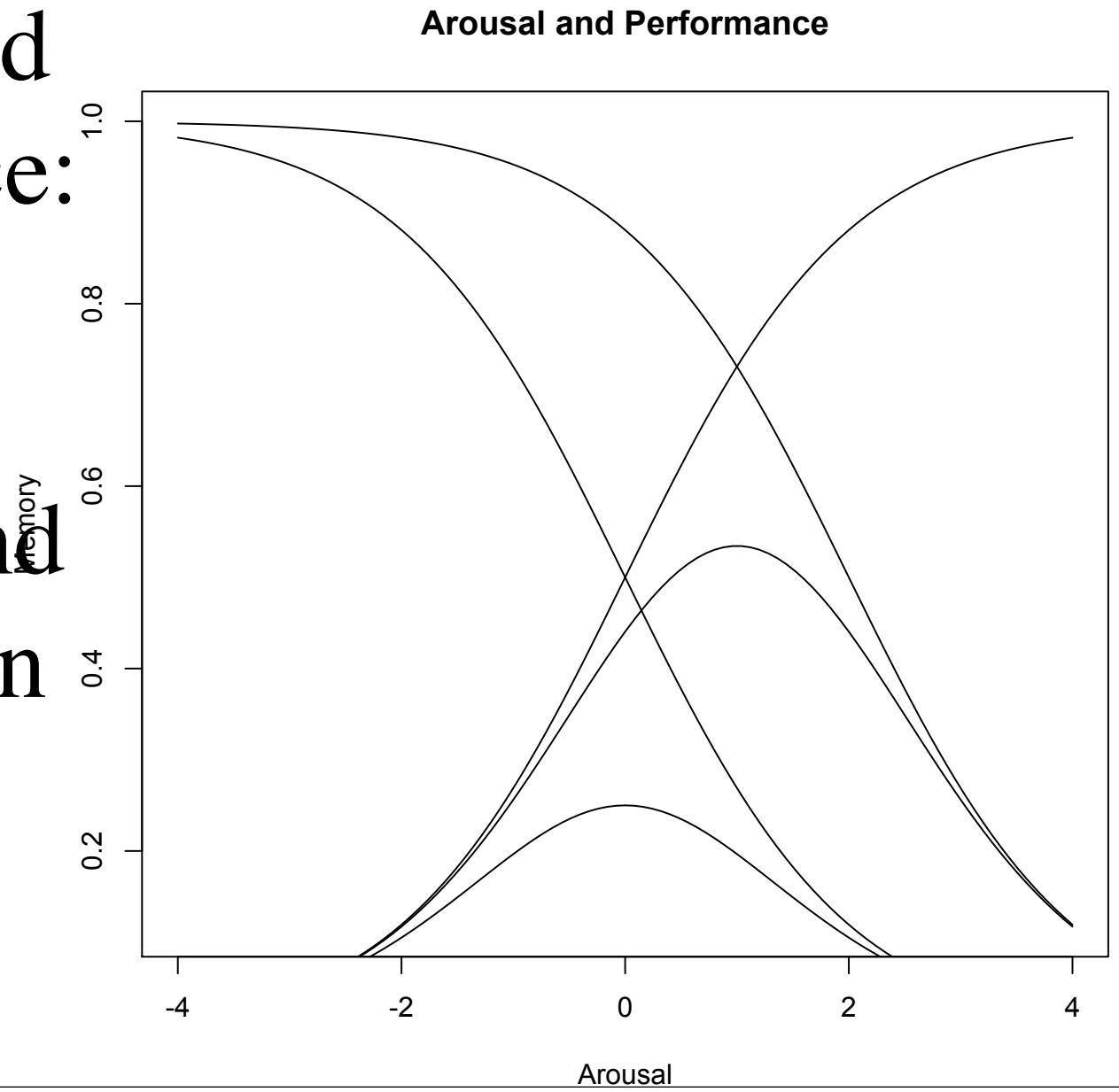
Arousal and Working Memory

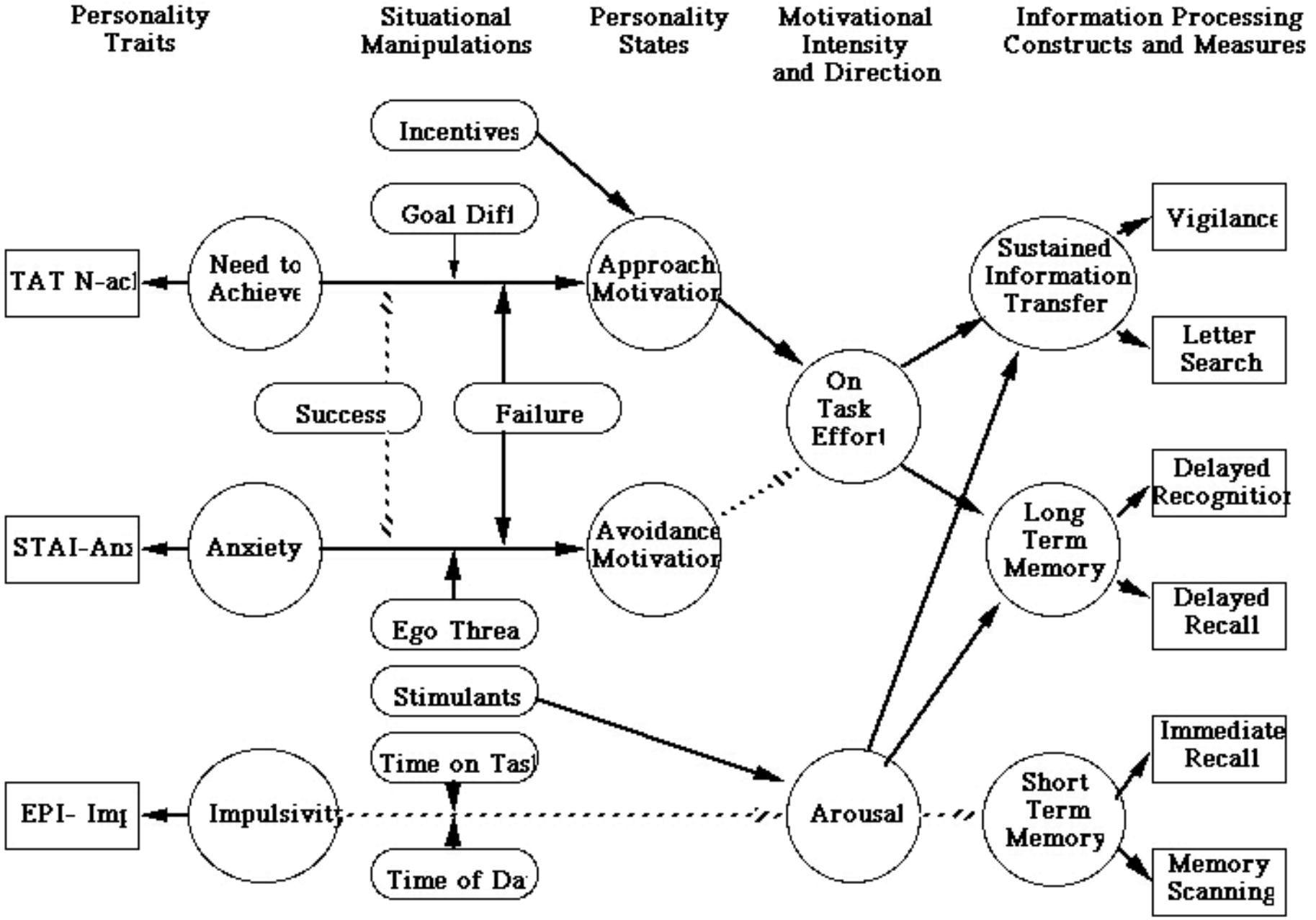


Arousal and Information Transfer



Arousal and Performance: Arousal, Working Memory and Information Transfer





Humphreys and Revelle, Psychological Review, 1984

Using simulation to test theory

- Some theories can be too complicated to see all possible predictions. One solution is to write the theory as a set of complex, interacting relationships and to test whether the theory as simulated produces "real world" like results.
- Examples of such simulations include the global climate change model, simulations of the BIS/ BAS, as well as a model developed from Humphreys and Revelle.

Simulation study

- This experiment simulates the complexity of a real research program by simulating the complex relationships between a set of observed characteristics of individuals, how they react to situations in terms of their motivational state, and how motivational state, in turn, affects cognitive performance. Prior work in the Personality, Motivation, and Cognition Laboratory at Northwestern has allowed us to formulate a complex model of human cognition in response to stress (Anderson and Revelle, 1994; Revelle, 1992; Revelle and Anderson, 1989; Revelle, Amaral and Turriff, 1976; Revelle, Humphreys, Simon and Gilliland, 1984). This simulation is based upon that work. In a sense, the simulation is a theory of the relationship between these four sets of variables (person characteristics, situational characteristics, intervening motivational states, and cognitive performance). The parameters of the model have been set to reflect empirical estimates of the strength of various relationships. Several nuisance variables have been added to more properly simulate the problems of experimental design.

Limited tests

- This simulation of the theory may be used as a test of the theory as well as a tool for understanding the complexity of research. That is, although one may want to study the full model, because of the limitations one's time and energy, one may study only a limited aspect of the model. The student's objective is two fold: to better understand a limited aspect of a particular psychological theory, and to try to understand what are the relationships that have been specified in the model.

Variables

- Subject variables:
  - Impulsivity (0-10)
  - Anxiety (0-10)
  - Sex (Male/Female) (1/2)
  - Subject Number (1-100) (time of quarter effect?)
- Experimental variables
  - Time of day (800 - 2200)
  - Placebo/Caffeine (0/1)
- Outcome variables
  - Energetic Arousal (0-100)
  - Tense Arousal (0-100)
  - Performance (0-100)

Variables: elaboration

- Drug has two levels (0=Placebo or 1=Caffeine). Caffeine is known to act as a central nervous system stimulant although it has some side effects such as tremor (Revelle, et al., 1976).

- Time of Day has 15 levels (8 AM ... 10 PM or 8 ...22). Although most cognitive psychologists do not examine the effects of time of day on cognitive performance, there is a fairly extensive literature suggesting that performance does vary systematically across the day (Revelle, et al., 1980).

- Impulsivity is a stable personality trait associated with making up one's mind rapidly and doing and saying things with out stopping to think. It has been shown in prior work to relate to an inability to sustain performance. Theories of impulsivity have also suggested that impulsivity is related to a general sensitivity to cues for reward and to a greater propensity towards positive affect (Gray, 1991). In this simulation, impulsivity can take on values from 0-10.

- Trait anxiety is a stable personality trait associated with feelings of tension, worry, and somatic distress. Trait anxious individuals are more sensitive to cues for punishment and non-reward and are also more likely to experience negative affect than are less trait anxious individuals (Gray, 1991). In this simulation, anxiety can take on values from 0-10.

- Sex of subject sometimes interacts with characteristics of the experiment (sex of experimenter, stress of experiment, type of task) and has sometimes been associated with levels of anxiety. In this study, Sex varies randomly taking on the values of 1 or 2. (Using the mnemonic of the number of X chromosomes, that is 1=M and 2=F)

Outcome (dependent) variables

- Energetic arousal reflects self reports of feelings of energy, activity, and alertness. EA has been shown to increase with exercise and to decrease with sleep deprivation (Thayer, 1988). EA is also associated with feelings of positive affect (Watson and Tellegen, 1985).

- Tense arousal reflects feelings of tension, frustration, and fear (Thayer, 1989) and is moderately associated with feelings of negative affect (Watson and Tellegen, 1985).

- Performance in this simulation reflects accuracy on a simple decision task. A perfect score is 100, and performance deteriorates from that as a function of condition and motivational state. Abstractly, this may be thought of as accuracy on a vigilance task, or the ability to make accurate judgments on some sustained processing task.

What to test

- Any experiment pits power against practicality. That is, the more subjects that are studied, the more statistical power that one has to detect an effect. However, subjects are not an unlimited resource. They are hard to recruit and they are time consuming to run. In addition, for a particular number of subjects, as the number of variables that are examined increases, the potential number of higher order relationships (interactions) increases dramatically at the same time that the power to detect these interaction decreases because of the limited number of subjects in any one condition.
-
- A reasonable approach is do have some theoretical reason to believe that a certain relationship exists, and then perhaps conduct a series of "pilot" studies to determine the sensitivity of certain parameter values.

- The goal of this project is to try to determine at least some of the relationships that have been built into the model. You will be evaluated on principles of experimental design, not on the significance of the results.

Simulation experiment

- http://personality-project.org/revelle/syllabi/205/simulation/simulation.experiment.php

- Linked on the syllabus for May 5th

What are the variables you can specify in this simulation?

Independent variables that are under control of the experimenter may be categorized as experimental variables and subject variables. Experimental variables may be manipulated by the experimenter. Subject variables are characteristics of the subjects that may be measured but not manipulated.

In this experiment the Experimental Variables include

1. Drug condition (placebo or caffeine),
2. Time of Day. Given the realities of volunteer subjects, Time of Day is assumed to only vary between 8 am and 10 PM (22.00 hours).

The **Subject Variables** are that are "assessed" are:

1. Sex (Male=1, Female=2)
2. Trait Anxiety (0-10)
3. Trait Impulsivity (0-10)
4. Subject Number reflects when the subject appears in the quarter.

The **Dependent Variables** are measures of motivational state

1. Energetic Arousal
2. Tense Arousal)
3. Performance (accuracy on some attention task)

The values of the IVs and DVs may be specified by the experimenter for each subject, or may be allowed to vary randomly. If allowed to vary randomly, the experimental variables will be assigned values in a uniform random distribution. The subject variables may either be specified (this simulates choosing particular subjects based upon a pretest) or may be allowed to vary randomly. If varying, they will be assigned values based upon samples from a normal distribution. If subjects are selected for particular personality types, this is the same as rejecting many potential subjects and thus the Cost of running grows more rapidly than the simple number of subjects who participate.

It is a good idea to think carefully about your design before you run it.
Subject Number increases for every subject run in a particular experiment. Currently, it can not exceed 1000, but most runs will use less than 100. You will be asked to specify the number of subject that you want to run.

How many subjects do you want to run?

Sample Screen

This form will allow you to run up to the 12 subjects that you specified. For each simulated participant you need to specify the experimental conditions. When you are finished with specifying all the subjects, you can enter submit (at the end of the page). If you specify less than 12 participants, the last N will be filled with random participants. You can edit these out later in the statistical analysis if you choose.
Enter the conditions for the subject 1

Sex Random or Male Female
Drug Random or Placebo Caffeine
Time of Day Random or Fixed 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Anxiety Random or Fixed 0 1 2 3 4 5 6 7 8 9 10
Impulsivity Random or Fixed 0 1 2 3 4 5 6 7 8 9 10

Enter the conditions for the subject 2
Sex Random or Male Female
Drug Random or Placebo Caffeine
Time of Day Random or Fixed 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Anxiety Random or Fixed 0 1 2 3 4 5 6 7 8 9 10
Impulsivity Random or Fixed 0 1 2 3 4 5 6 7 8 9 10

After many subjects:

Enter the conditions for the subject 11
Sex Random or Male Female
Drug Random or Placebo Caffeine
Time of Day Random or Fixed 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Anxiety Random or Fixed 0 1 2 3 4 5 6 7 8 9 10
Impulsivity Random or Fixed 0 1 2 3 4 5 6 7 8 9 10

Enter the conditions for the subject 12
Sex Random or Male Female
Drug Random or Placebo Caffeine
Time of Day Random or Fixed 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Anxiety Random or Fixed 0 1 2 3 4 5 6 7 8 9 10
Impulsivity Random or Fixed 0 1 2 3 4 5 6 7 8 9 10

Ok, I am finished, show me the data

The data are shown on the screen

snum	sex	drug	time	anxiety	impulsivity	arousal	tension	performance	cost
1	2	1	12	4	6	-3	29	49	1
2	1	1	21	3	3	22	24	50	1
3	1	0	9	4	4	1	13	48	1
4	2	0	8	6	6	-55	21	39	1
5	2	1	11	4	3	18	30	49	1
6	1	1	8	2	3	29	13	46	1
7	2	1	14	3	6	96	27	63	1
8	1	1	12	2	4	139	15	88	1
9	1	0	8	1	9	-50	7	58	1
10	2	0	9	4	8	81	15	69	1
11	2	1	22	1	9	139	16	82	1
12	2	0	14	5	3	49	22	60	1

Either, copy and paste into R using read.clipboard, or save as a txt file for your favorite stats program

Study 2: Simulated experiment

- Develop a hypothesis of the relationship between some set of the possible variables
- Design an experiment to test this hypothesis
  - what are the Independent Variables to be tested?
    - what and how many levels to use
    - continuous or discrete categories?
  - What are the Dependent Variables to be observed
  - Should other variables be fixed or random?
    - consider the generality of the result

Simulation study

- Full model is too complicated to study, need to choose a limited set of “interesting” variables.
- Choose among a set of independent and dependent variables
- Examine how these variables interrelate.

Simulation study: Variables

- Impulsivity (0-10)
- Anxiety (0-10)
- Caffeine (0,1)
- Time of Day (8-24)
- Gender (M=1, F=2)
- Energetic Arousal (0-100)
- Tense Arousal (0-100)
- Performance (attention task) (0-100)

Simulation Study: Independent Variables

- Either let the computer randomly assign subjects to values on the IV s or you assign them your self
- Caffeine
- Time
- Impulsivity
- Anxiety
- Sex

Simulation Study: What to do before Monday

- Develop hypotheses that you want to test
- Design an experiment that can test your hypothesis
- Consider issues of counterbalancing, randomization, etc. to control for time in quarter effects (if they are there).
- Consider how subjects are to be run (what conditions, what orders, what should be randomized, what controlled).

Simulation study: Things to consider

- Issues of power vs. time
  - More subjects lead to smaller standard errors and greater chance of detecting effects.
  - More subjects take longer to run
- Cost of running subjects
  - Selecting extreme scores on personality variables is done by group testing and leads to fewer subjects being available or greater cost per subject

Issues to Consider

- Design study that makes sense
- Don’t try to study all possible variables
- Design a study that is interesting to you.

Searching the Literature

- Science does not occur in a vacuum
  - Current research reflects the contributions of previous studies
  - “I can see so far only because I stand on the shoulders of giants” (Newton)
- Published results have been reviewed by peers and judged to make significant contributions

Searching the Literature

- Read current articles in reputable journals
- Search for articles based upon keywords in their abstracts (PsychInfo)
- Search for articles based upon the previous work they cite (Social Science Citation Index as found in Web of Science or following cited by in psych info)

Multiple sources are

I. Searching books

   A. limited current but of historical interest

   B. Many references are irrelevant

II. Searching journal articles

Journals

- Not all journals are equal
  - Quality of peer review
  - Breadth of distribution
- General APA, APS journals
  - Psychological Review
  - Psychological Bulletin
  - Psychological Science
- Field specific
  - Journal of Personality and Social Psychology
  - Journal of Experimental Psychology

Personality Journals

- General
  - Annual Review of Psychology
  - Psychological Review
  - Psychological Bulletin
  - Psychological Science
- Personality Specific
  - Journal of Personality and Social Psychology
  - Journal of Personality
  - Journal of Research in Personality
  - Personality and Individual Differences
  - European Journal of Personality

Psychology

Tags: psychology behavioral_science cognitive_science

Google Scholar

Google Scholar BETA

Search

(search results open in a new window)

Accessing Full Text

Some article databases provide full text while most only provide references to articles.

Look out for the purple "Find it @ NU" button Find it @ NU among your database search results.

Click on the button to see if Northwestern provides full text access to the article via one of our electronic journal packages.

Key Resources

- PsycINFO
  Index to the professional and academic literature in psychology and related disciplines. Covers 1860-present.
- Annual Review of Psychology
  Annual edited volume of articles demonstrating the current trends in research and inquiry in the field of psychology. Online version covers 1950-present.
- Web of Science
  Provides access to the Science Citation Index, Social Sciences Citation Index, and Arts & Humanities Citation Index. Covers 1945-present. Also includes the Conference Proceedings Citation Index-Science (1990-present).
- Social Science Abstracts (Wilson)
  Index to international, English-language periodicals in the social sciences, including sociology, anthropology, geography, economics, political science, and law. Some records include full-text links. Covers 1983-present.
- PsycEXTRA
  Companion to the PsycINFO database. PsycEXTRA covers technical, annual and government reports, conference papers, newsletters, magazines, newspapers, consumer brochures, and more not found in other databases. Covers mostly back to the 1940s, with some earlier material.

Related Resources

- PsycARTICLES
  Definitive source of full-text, peer-reviewed scholarly and scientific articles in psychology published by the APA and allied organizations. Think of this as a full-text subset of what you'd find in PsycINFO. Covers 1894-present.

Your Librarian

John Hernandez

Contact Info:
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Main Library, 2East, Room 2625
(847) 491-7602
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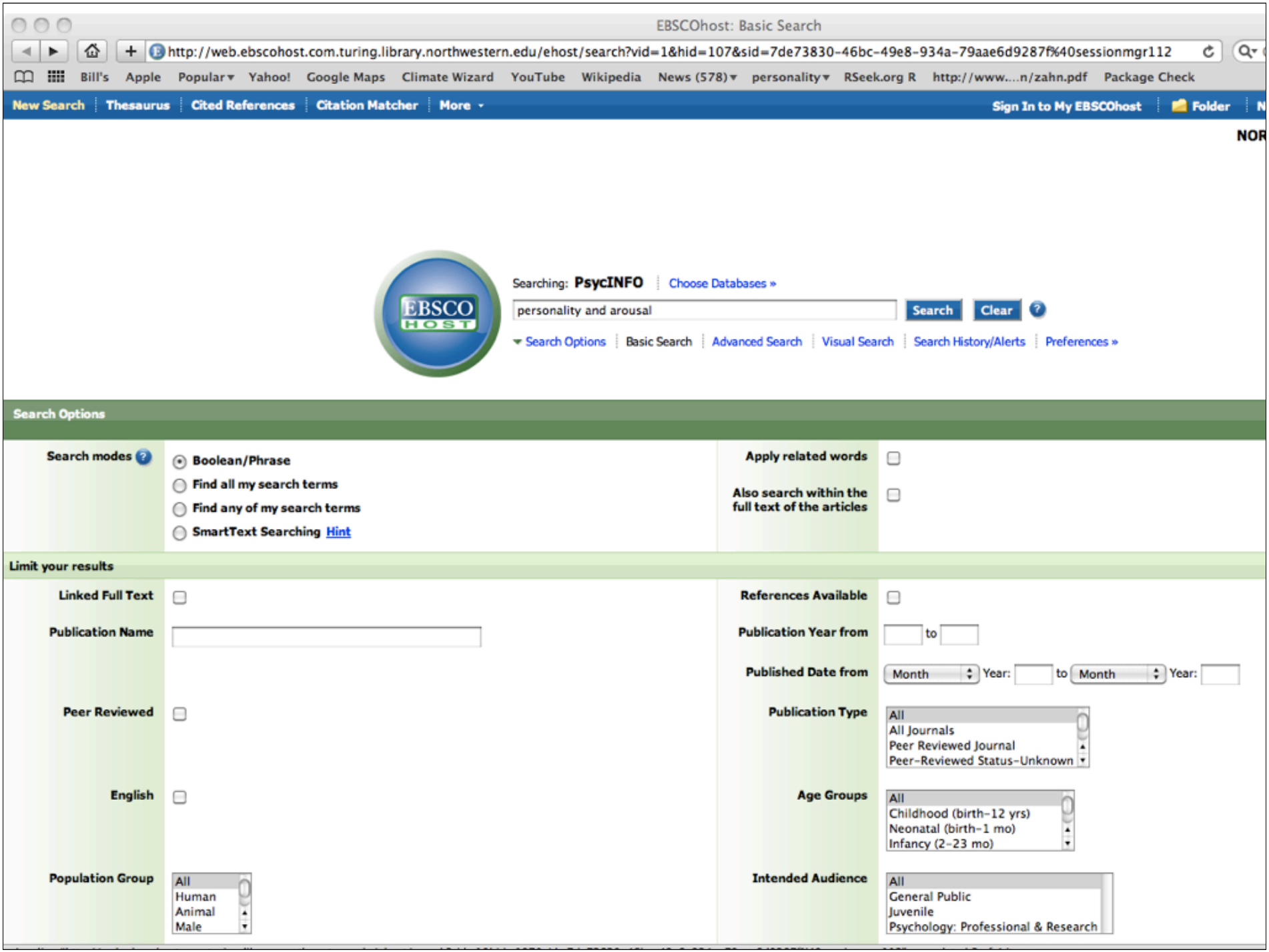
Subjects:
Social Sciences, Economics, Psychology, Cognitive Science, Latino Studies


EBSCOhost: Basic Search
http://web.ebscohost.com.turing.library.northwestern.edu/ehost/search?vid=1&hid=107&sid=7de73830-46bc-49e8-934a-79aae6d9287f%40sessionmgr112
Bill's Apple Popular Yahoo! Google Maps Climate Wizard YouTube Wikipedia News (578) personality RSeek.org R http://www....n/zahn.pdf Package Check
New Search Thesaurus Cited References Citation Matcher More
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personality and arousal
Search Clear
Search Options Basic Search Advanced Search Visual Search Search History/Alerts Preferences »
Search Options
Search modes
Boolean/Phrase
Find all my search terms
Find any of my search terms
SmartText Searching Hint
Apply related words
Also search within the full text of the articles
Limit your results
Linked Full Text
Publication Name
Peer Reviewed
English
Population Group
All
Human
Animal
Male
References Available
Publication Year from
to
Published Date from
Month
Year:
to
Month
Year:
Publication Type
All
All Journals
Peer Reviewed Journal
Peer-Reviewed Status-Unknown
Age Groups
All
Childhood (birth-12 yrs)
Neonatal (birth-1 mo)
Infancy (2-23 mo)
Intended Audience
All
General Public
Juvenile
Psychology: Professional & Research

Boolean Search

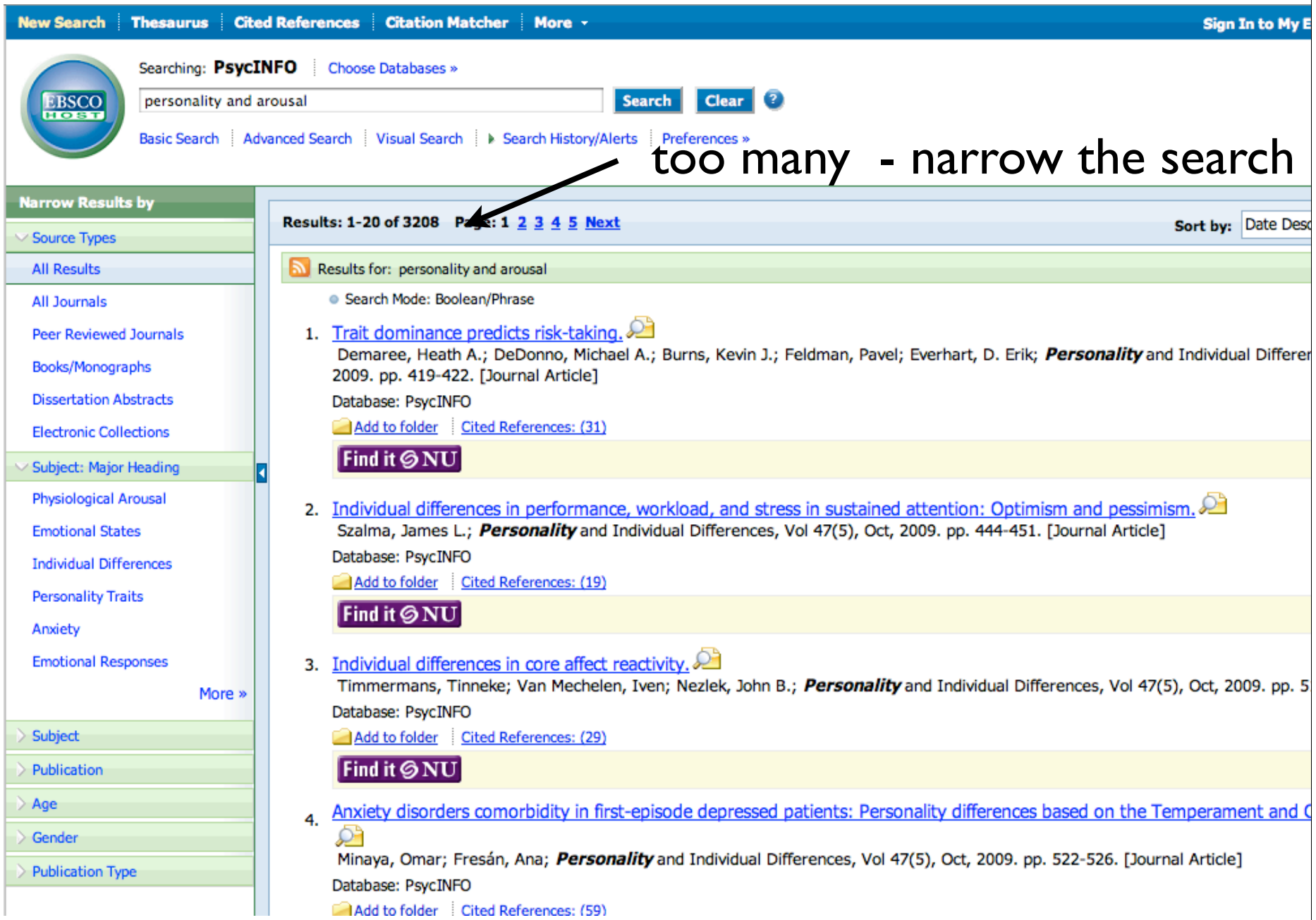
I. George Boole (1815-1864) and symbolic logic

   A. Intersections and Unions

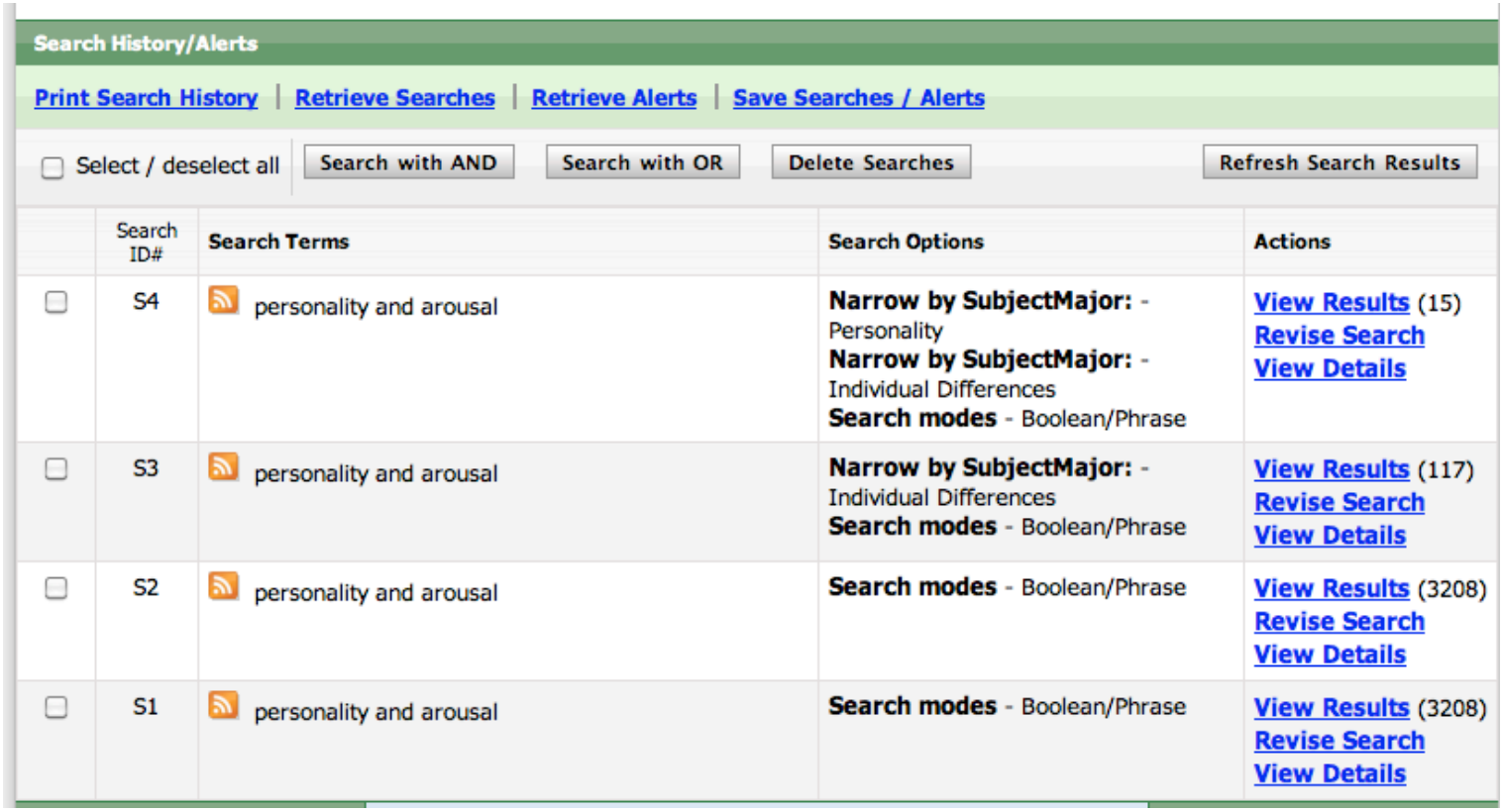
   B. AND (intersection) (+)

   C. NOT (-)

   D. OR (union)


New Search | Thesaurus | Cited References | Citation Matcher | More
Sign In to My E
Searching: PsycINFO | Choose Databases »
personality and arousal
Search
Clear
Basic Search | Advanced Search | Visual Search | Search History/Alerts | Preferences »
too many - narrow the search
Narrow Results by
Source Types
All Results
All Journals
Peer Reviewed Journals
Books/Monographs
Dissertation Abstracts
Electronic Collections
Subject: Major Heading
Physiological Arousal
Emotional States
Individual Differences
Personality Traits
Anxiety
Emotional Responses
More »
Subject
Publication
Age
Gender
Publication Type
Results: 1-20 of 3208 Page: 1 2 3 4 5 Next
Sort by: Date Desc
Results for: personality and arousal
Search Mode: Boolean/Phrase
1. Trait dominance predicts risk-taking.
Demaree, Heath A.; DeDonno, Michael A.; Burns, Kevin J.; Feldman, Pavel; Everhart, D. Erik; Personality and Individual Differer
2009. pp. 419-422. [Journal Article]
Database: PsycINFO
Add to folder | Cited References: (31)
Find it NU
2. Individual differences in performance, workload, and stress in sustained attention: Optimism and pessimism.
Szalma, James L.; Personality and Individual Differences, Vol 47(5), Oct, 2009. pp. 444-451. [Journal Article]
Database: PsycINFO
Add to folder | Cited References: (19)
Find it NU
3. Individual differences in core affect reactivity.
Timmermans, Tinneke; Van Mechelen, Iven; Nezlek, John B.; Personality and Individual Differences, Vol 47(5), Oct, 2009. pp. 5
Database: PsycINFO
Add to folder | Cited References: (29)
Find it NU
4. Anxiety disorders comorbidity in first-episode depressed patients: Personality differences based on the Temperament and C
Minaya, Omar; Fresán, Ana; Personality and Individual Differences, Vol 47(5), Oct, 2009. pp. 522-526. [Journal Article]
Database: PsycINFO
Add to folder | Cited References: (59)

Show the search history



Search History/Alerts

Print Search History | Retrieve Searches | Retrieve Alerts | Save Searches / Alerts

Select / deselect all | Search with AND | Search with OR | Delete Searches | Refresh Search Results

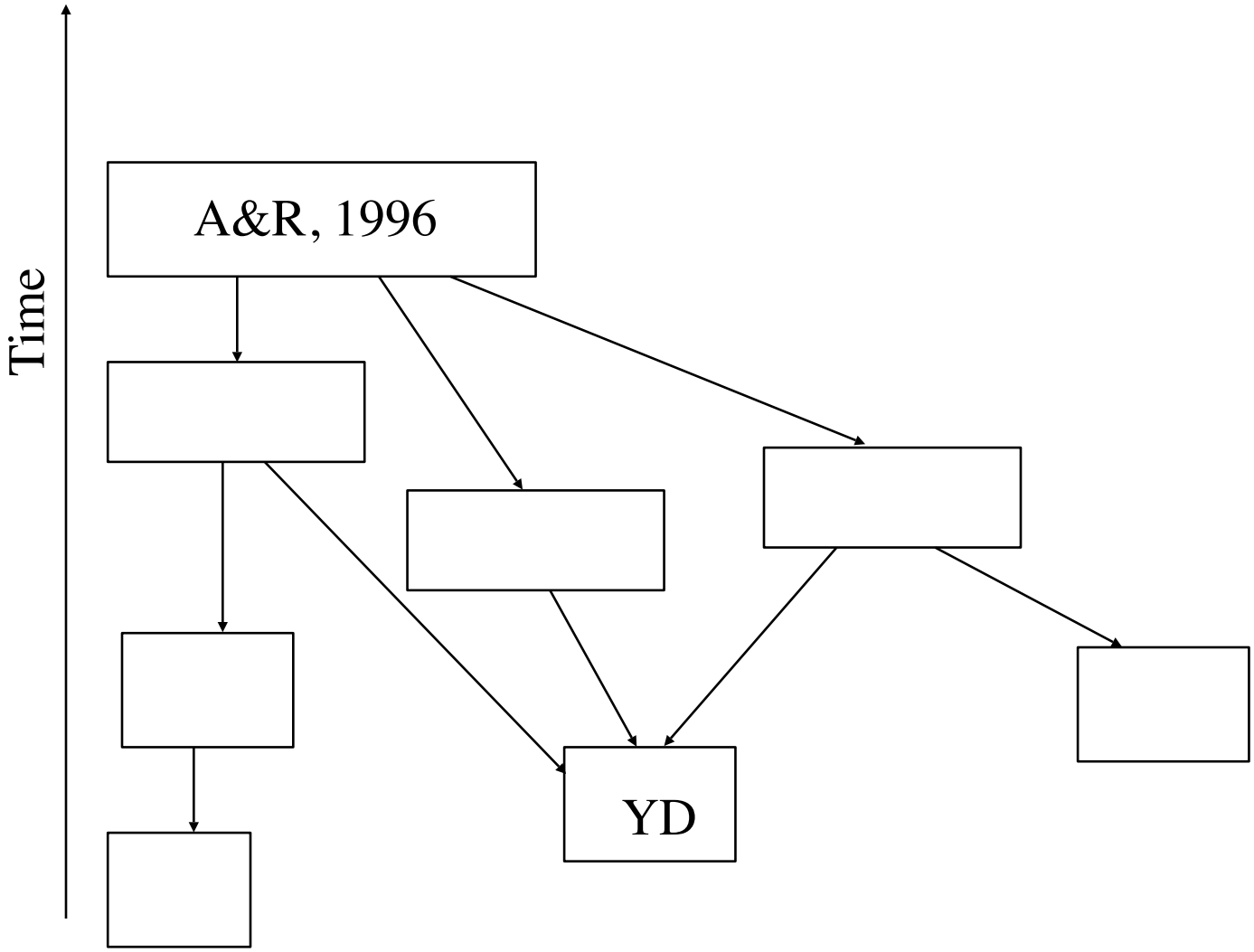
	Search ID#	Search Terms	Search Options	Actions
☐	S4	personality and arousal	**Narrow by SubjectMajor:** - Personality **Narrow by SubjectMajor:** - Individual Differences **Search modes** - Boolean/Phrase	View Results (15) Revise Search View Details
☐	S3	personality and arousal	**Narrow by SubjectMajor:** - Individual Differences **Search modes** - Boolean/Phrase	View Results (117) Revise Search View Details
☐	S2	personality and arousal	**Search modes** - Boolean/Phrase	View Results (3208) Revise Search View Details
☐	S1	personality and arousal	**Search modes** - Boolean/Phrase	View Results (3208) Revise Search View Details

Example of Psych Info

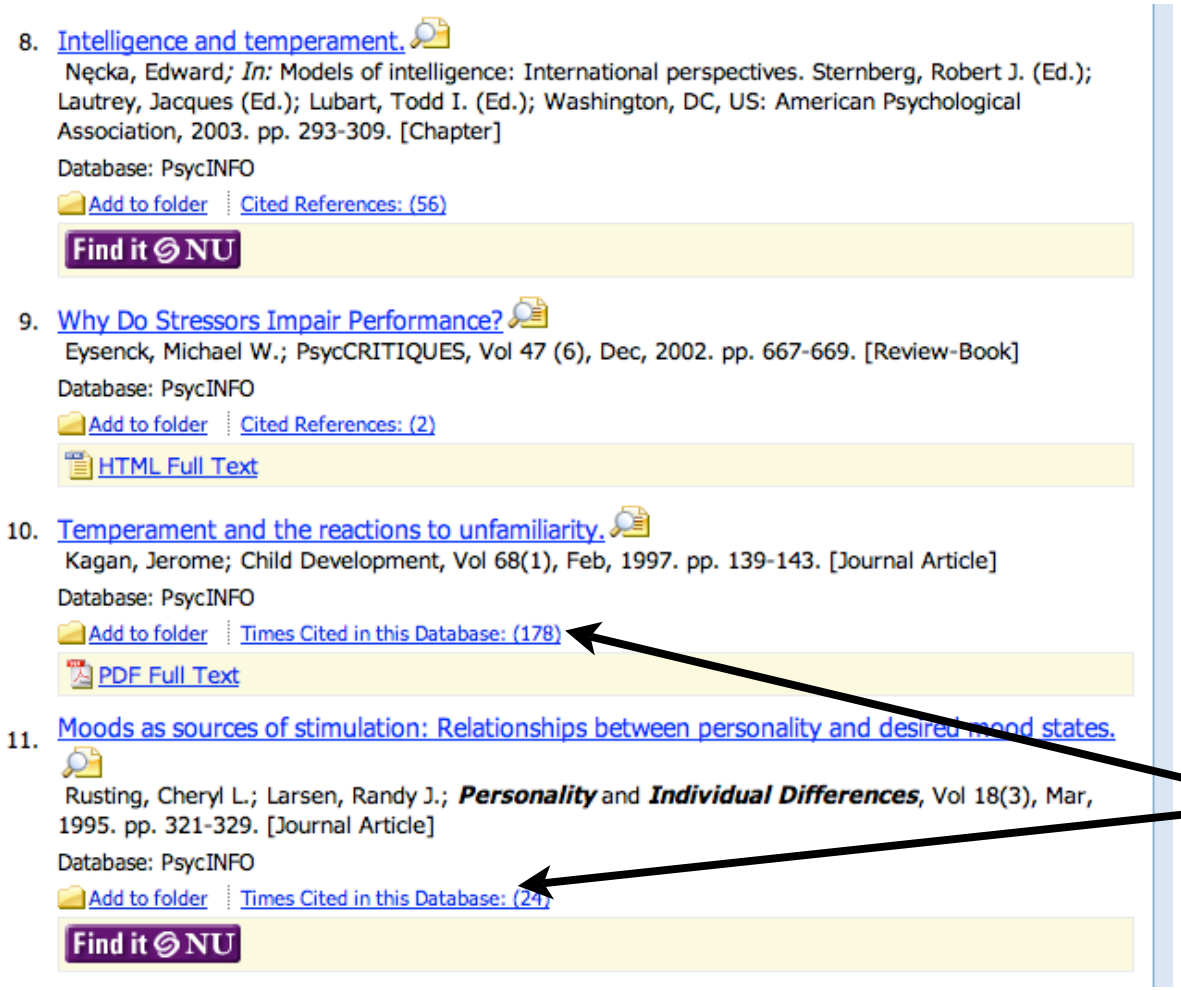
Find references to personality, arousal, and cognitive performance

	Search Term	Number of Hits
1	Physiological Arousal	12928
2	Personality	131460
4	1 and 2	1261
6	Cognition	4807
8	Memory	22443
9	1 and 8	288
10	9 and 2	24

Literature searching by articles



Scroll through titles



8. Intelligence and temperament.
Nęcka, Edward; *In:* Models of intelligence: International perspectives. Sternberg, Robert J. (Ed.); Lautrey, Jacques (Ed.); Lubart, Todd I. (Ed.); Washington, DC, US: American Psychological Association, 2003. pp. 293-309. [Chapter]
Database: PsycINFO
Add to folder | Cited References: (56)
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9. Why Do Stressors Impair Performance?
Eysenck, Michael W.; PsycCRITIQUES, Vol 47 (6), Dec, 2002. pp. 667-669. [Review-Book]
Database: PsycINFO
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10. Temperament and the reactions to unfamiliarity.
Kagan, Jerome; Child Development, Vol 68(1), Feb, 1997. pp. 139-143. [Journal Article]
Database: PsycINFO
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PDF Full Text

11. Moods as sources of stimulation: Relationships between personality and desired mood states.
Rusting, Cheryl L.; Larsen, Randy J.; ***Personality*** and ***Individual Differences***, Vol 18(3), Mar, 1995. pp. 321-329. [Journal Article]
Database: PsycINFO
Add to folder | Times Cited in this Database: (24)
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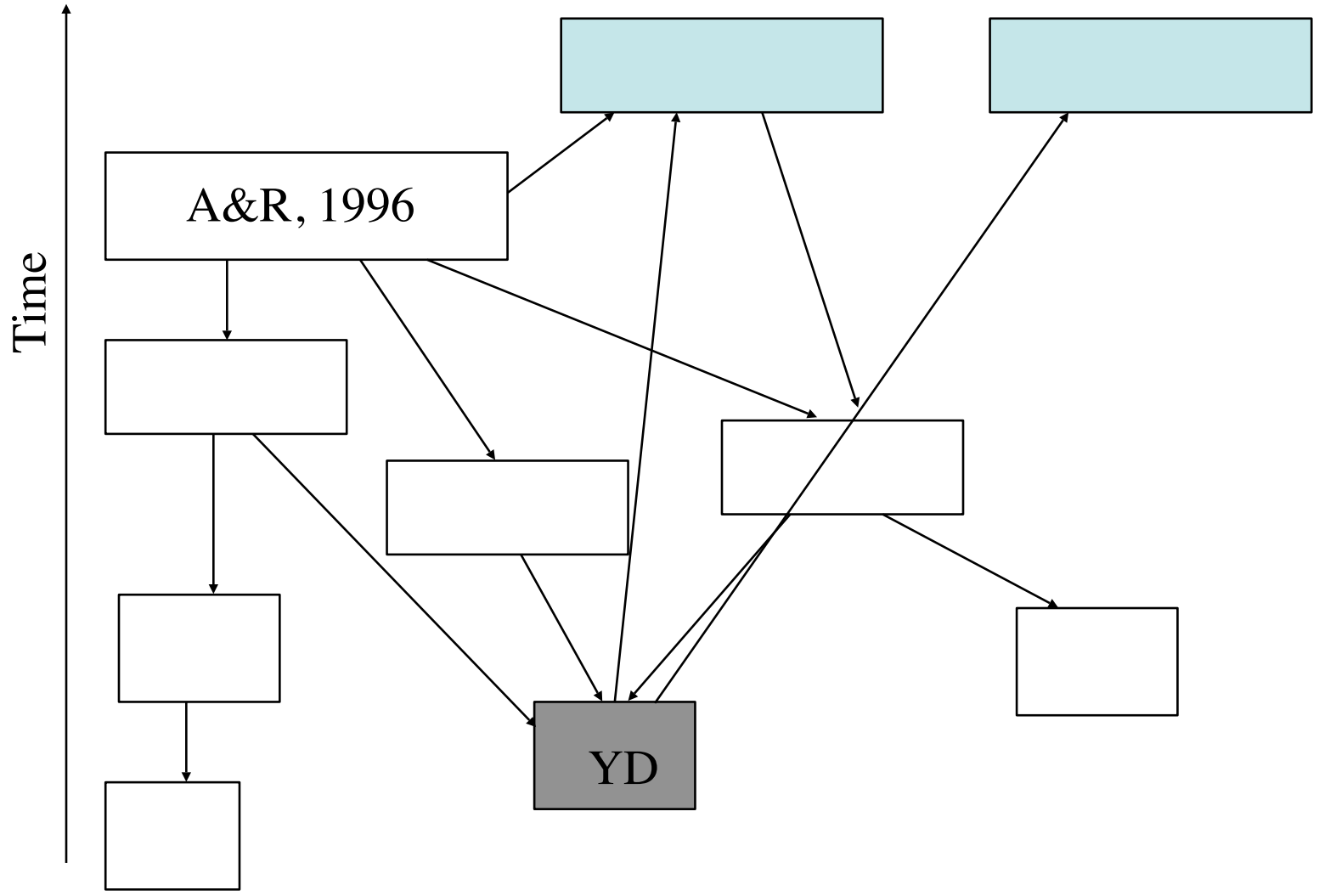
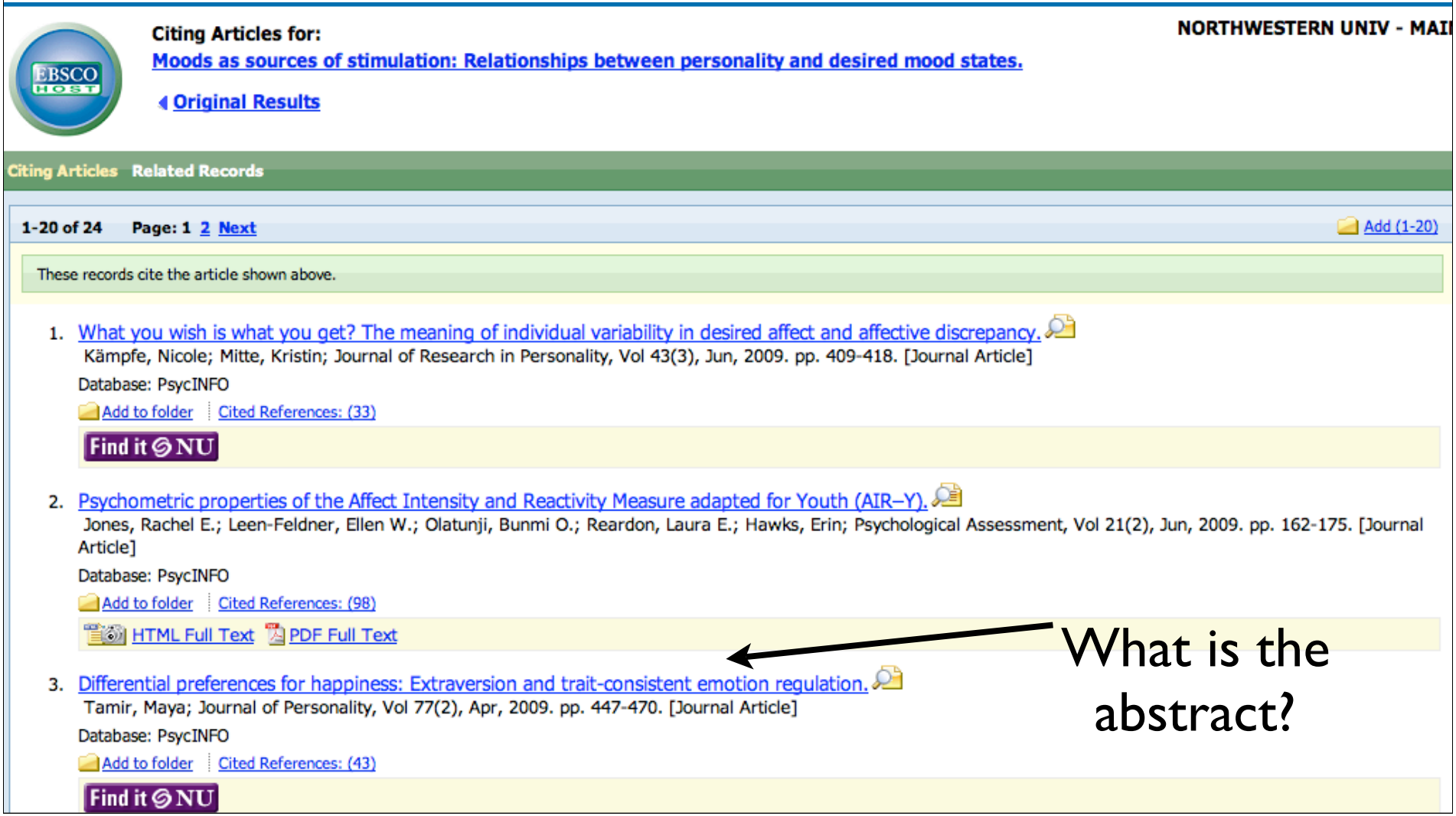
citation links

Literature searching by citations



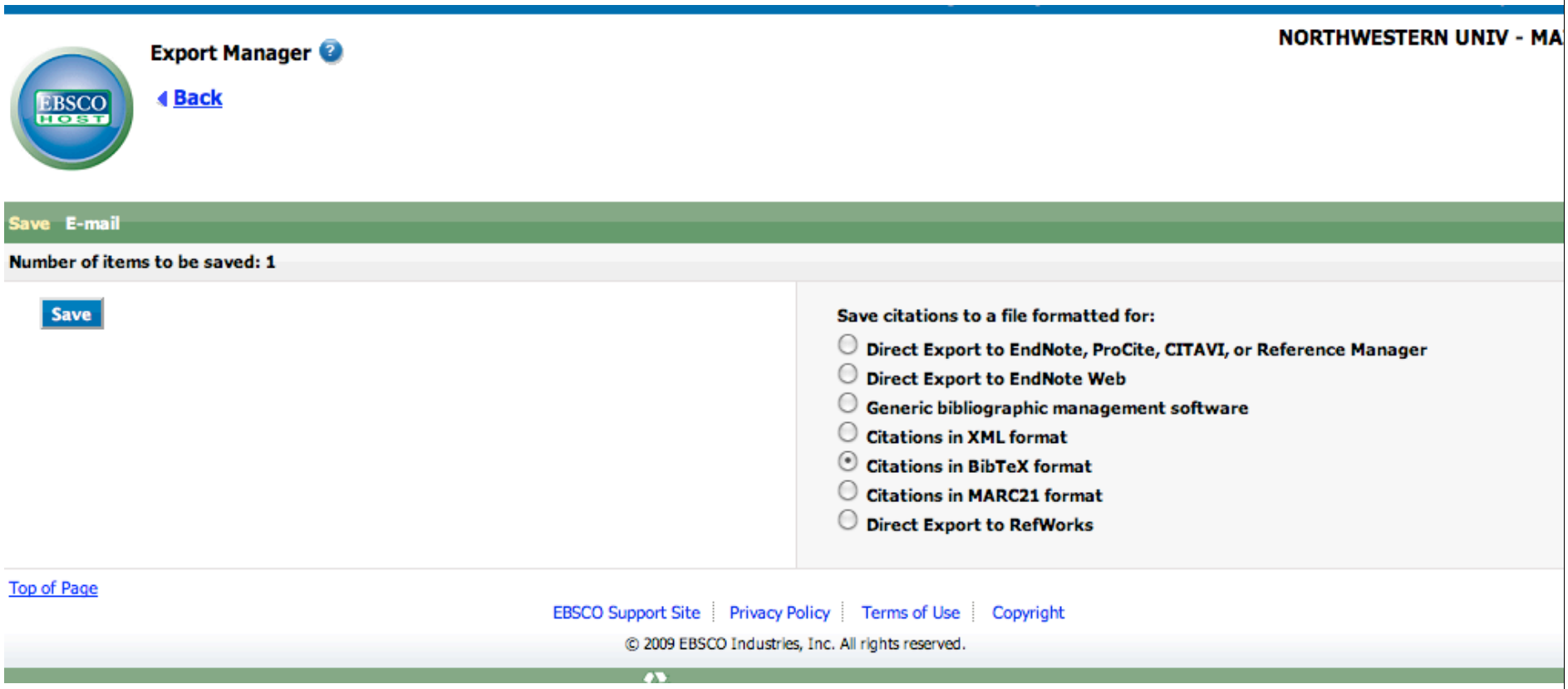
Citation links bring us back to current papers



The abstract

Title:	**Differential preferences for happiness: Extraversion and trait-consistent emotion regulation.**
Authors:	Tamir, Maya, Boston College, Chestnut Hill, MA, US, tamirm@bc.edu
Address:	Tamir, Maya, Department of Psychology, Boston College, 140 Commonwealth Ave., Chestnut Hill, MA, US, 02467, tamirm@bc.edu
Source:	Journal of Personality, Vol 77(2), Apr, 2009. pp. 447-470.
Publisher:	United Kingdom: Wiley-Blackwell Publishing Ltd..
Other Journal Titles:	Character & Personality; A Quarterly for Psychodiagnostic & Allied Studies
Other Publishers:	United Kingdom: Blackwell Publishing
ISSN:	0022-3506 (Print) 1467-6494 (Electronic)
Language:	English
Keywords:	happiness; trait extraversion; emotion regulation
Abstract:	The assumption that everyone wants to be happy is prevalent among psychologists and laypeople alike. The present investigation suggests that motives for happiness are not consistent across individuals or contexts. Three studies demonstrate that preferences for happiness vary as a function of trait extraversion and situational demands. When anticipating an effortful task that requires increased motivational engagement, individuals demonstrated trait-consistent emotional preferences. Extraverts were more likely to prefer happiness-inducing activities, whereas introverts were less likely to prefer such activities. These differential motives were specific to preferences for happiness compared to other emotions and independent of concurrent feelings. Overall, the present findings suggest that individuals low (vs. high) in extraversion may be less motivated to increase their happiness in effortful contexts. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (from the journal abstract)
Subjects:	*Emotional Regulation; *Extraversion; *Happiness

Save the abstract for your reference notes



Bibliographic management

I. Commercial bibliographic managers

   A. Endnote (free to NU students)

II. Open source bibliographic managers

   A. BibTeX (BibDesk is the Mac implementation)

Bibliographic management

I. For short papers/projects just copy the citation information

II. For longer term projects it is worth building up a data base using EndNote or BibTeX.

First Author	Cite Key	Year	Title	Dat	BibTeX Type	Second Author	Third Author
Surault, F.	Surault:1831it	1831	An easy grammar of the French language, for youn...		book		
Swami, V.	http://dx.doi.org/...	2008	The influence of men's sexual strategies on percep...		article	Miller, R.	Furnham, A.
Swickert, R. J.	swickert:gilliland:98	1998	Relationship between the brainstem auditory evok...		article	Gilliland, K.	
Swickert, R.	Swickert:1998ax	1998	Relationship between the brainstem auditory evok...		article	Gilliland, K.	
Tackett, J. L.	http://dx.doi.org/...	2008	A dimensional model of personality disorder: Incor...		article	Silberschm...	Krueger, R. F.
Tamir, M.	tamir:09	2009	Differential preferences for happiness: Extraversio...		article		
Tamir, M.	tamiretal:02	2002	The epistemic benefits of trait-consistent mood st...		article	Robinson, ...	Clore, G. L.
Tang, T. Z.	tang:99	1999	Sudden gains and critical sessions in cognitive-be...		article	DeRubeis, ...	
Tang, T. Z.	tang:07	2007	Sudden gains in cognitive therapy of depression a...		article	DeRubeis, ...	Hollon, S. D.
Tataryn, D. J.	http://dx.doi.org/...	1999	Setting the value of k in promax: A Monte Carlo study		article	Wood, J. M.	Gorsuch, R. L.
Tellegen, A.	tellegen:82	1982	Brief Manual for the Differential Personality Questi...		misc		
Tellegen, A.	tellegen:85	1985	Structures of mood and personality and their relev...		incollection		
Tellegen, A.	tellegenetal:88	1988	Personality similarity in twins reared apart and together		article	Lykken, D. T.	Bouchard, T. J.
Tellegen, A.	http://dx.doi.org/...	1982	Recognizing individual differences in predictive str...		article	Kamp, J.	Watson, D.
Tellegen, A.	http://dx.doi.org/...	1999	Further support for a hierarchical model of affect: ...		article	Watson, D.	Clark, L. A.

tamir:09

Differential preferences for happiness: Extraversion and trait-consistent emotion regulation. (article)

Author
Tamir, Maya

Journal
Journal of Personality

Year
2009

Volume
77

Number
2

Pages
447 - 470

Keywords
happiness, trait extraversion, emotion regulation, Emotional Regulation, Extraversion, Happiness

Abstract
The assumption that everyone wants to be happy is prevalent among psychologists and laypeople alike. The present investigation suggests that motives for happiness are not consistent across individuals or contexts. Three studies demonstrate that preferences for happiness vary as a function of trait extraversion and situational demands. When anticipating an effortful task that requires increased motivational engagement, individuals demonstrated trait-consistent emotional preferences. Extraverts were more likely to prefer happiness-inducing activities, whereas introverts were less likely to prefer such activities. These differential motives were specific to preferences for happiness compared to other emotions and independent of concurrent feelings. Overall, the present findings suggest that individuals low (vs. high) in extraversion may be less motivated to increase their happiness in effortful contexts. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (from the journal abstract)

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2009-10-19 10:20:10 -0500

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2009-10-19 10:20:48 -0500

Issn
0022-3506

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Paper 2

I. Before doing the experiment, read some of the literature

II. Develop a hypothesis (or two)

III. Think about a good design

IV. Do the study

V. Analyze the data

What is arousal?

I. One dimension or two (or three?)

II. Energetic versus Tense Arousal (Thayer)

   A. Energetic Alert vs. Sleepy

   B. Tense Anxious vs. calm

Consider the response of items

Motivational State Questionnaire items in psych package

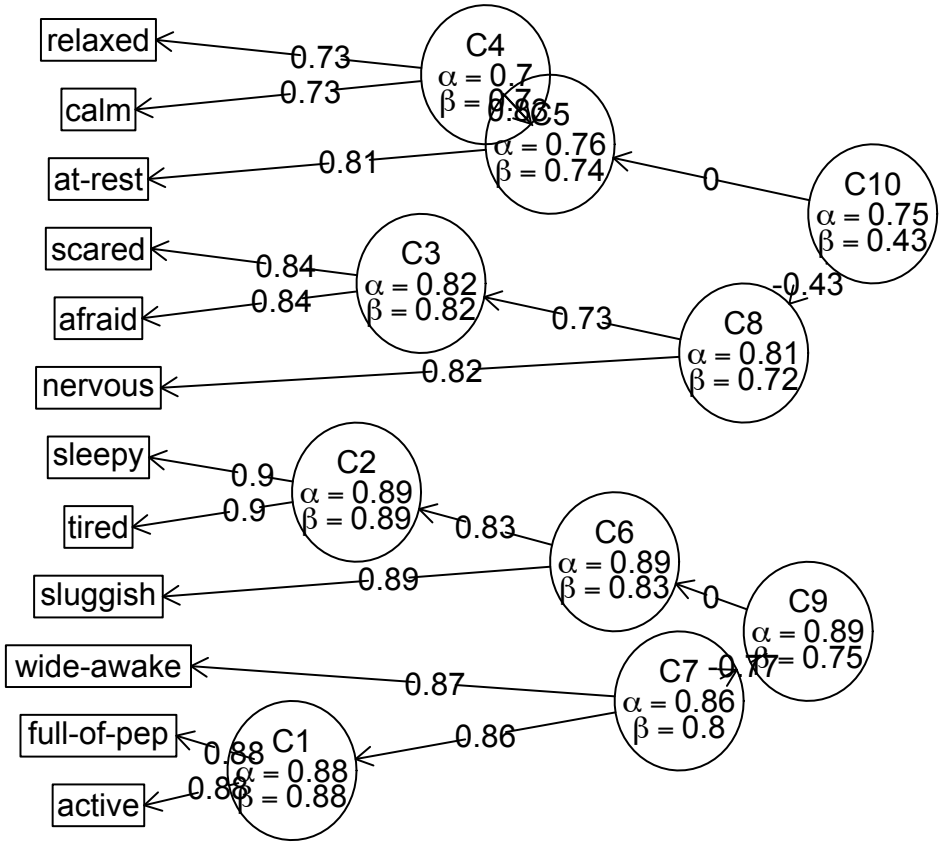
```
> describe(msq[c(EA,TA)])
           var    n mean   sd median trimmed  mad min max range  skew kurtosis   se
active       1 3890 1.03 0.93      1    0.95 1.48   0   3     3  0.47    -0.76 0.01
full-of-pep  2 3884 0.81 0.91      1    0.69 1.48   0   3     3  0.83    -0.34 0.01
wide-awake   3 3884 0.94 0.95      1    0.83 1.48   0   3     3  0.65    -0.63 0.02
tired        4 3886 1.39 1.04      1    1.36 1.48   0   3     3  0.22    -1.10 0.02
sluggish     5 3888 1.17 0.97      1    1.09 1.48   0   3     3  0.46    -0.74 0.02
sleepy       6 3880 1.25 1.05      1    1.18 1.48   0   3     3  0.40    -1.04 0.02
afraid       7 3891 0.12 0.40      0    0.00 0.00   0   3     3  4.18    19.99 0.01
nervous      8 3879 0.35 0.65      0    0.22 0.00   0   3     3  1.93     3.47 0.01
scared       9 3886 0.17 0.48      0    0.04 0.00   0   3     3  3.25    11.36 0.01
calm        10 3814 1.55 0.92      2    1.56 1.48   0   3     3 -0.01    -0.83 0.01
at-rest     11 3879 1.20 0.92      1    1.13 1.48   0   3     3  0.33    -0.74 0.01
relaxed     12 3889 1.68 0.88      2    1.72 1.48   0   3     3 -0.17    -0.68 0.01
>
```

Correlations

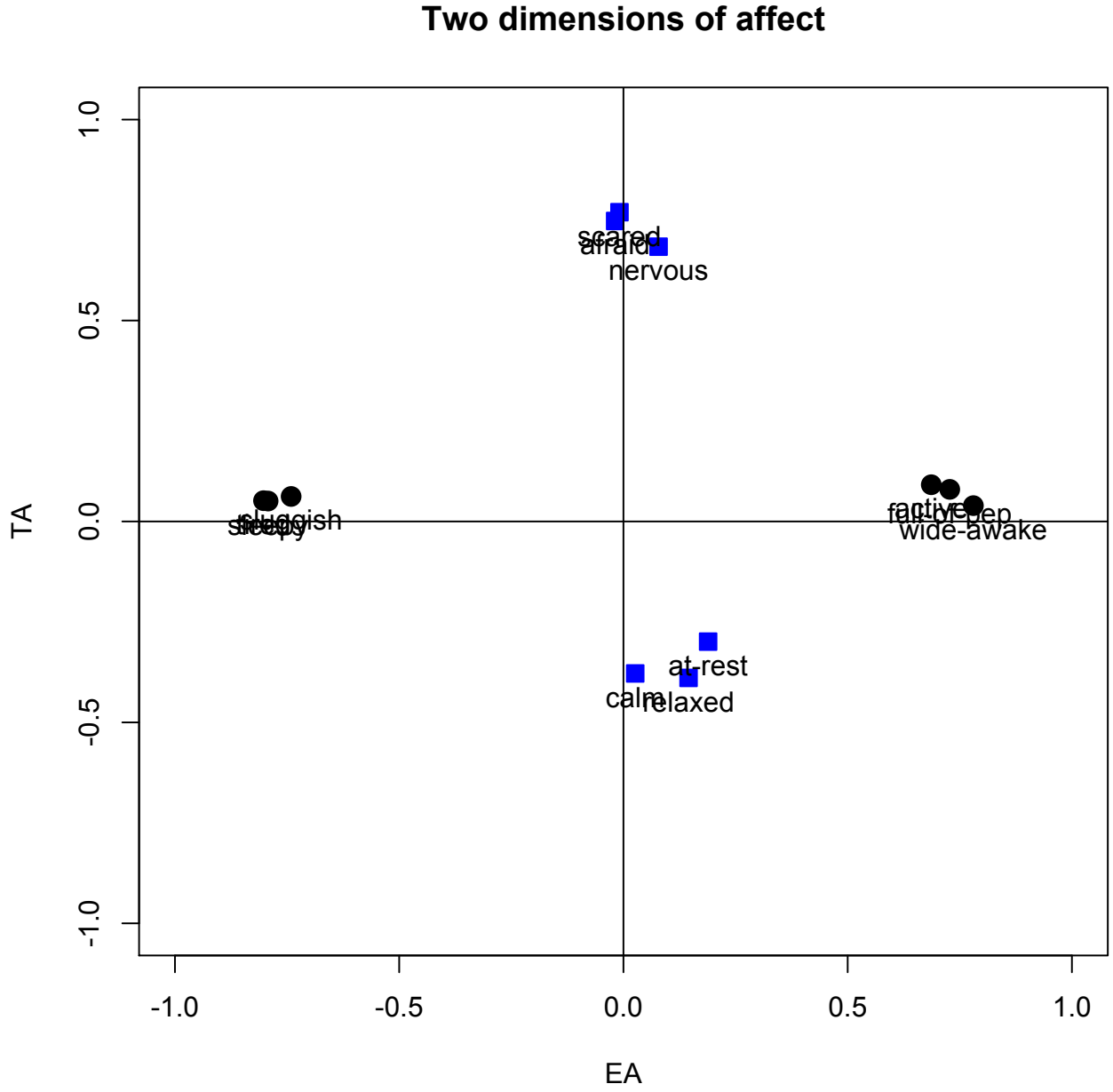
```
> round(r.affect,2)
           active full-of-pep wide-awake tired sluggish sleepy afraid nervous scared  calm at-rest relaxed
active       1.00        0.78       0.60 -0.42    -0.45  -0.40   0.01    0.11   0.03  0.06    0.15    0.16
full-of-pep  0.78        1.00       0.66 -0.46    -0.48  -0.44   0.00    0.10   0.01  0.05    0.15    0.17
wide-awake   0.60        0.66       1.00 -0.58    -0.51  -0.59  -0.01    0.08   0.00  0.09    0.22    0.15
tired       -0.42       -0.46      -0.58  1.00     0.68   0.81   0.08    0.01   0.08  0.01   -0.13   -0.08
sluggish    -0.45       -0.48      -0.51  0.68     1.00   0.67   0.10    0.02   0.10  0.01   -0.09   -0.08
sleepy      -0.40       -0.44      -0.59  0.81     0.67   1.00   0.08    0.02   0.08  0.03   -0.13   -0.07
afraid       0.01        0.00      -0.01  0.08     0.10   0.08   1.00    0.51   0.70 -0.16   -0.12   -0.17
nervous      0.11        0.10       0.08  0.01     0.02   0.02   0.51    1.00   0.53 -0.27   -0.17   -0.28
scared       0.03        0.01       0.00  0.08     0.10   0.08   0.70    0.53   1.00 -0.19   -0.13   -0.21
calm         0.06        0.05       0.09  0.01     0.01   0.03  -0.16   -0.27  -0.19  1.00    0.49    0.54
at-rest      0.15        0.15       0.22 -0.13    -0.09  -0.13  -0.12   -0.17  -0.13  0.49    1.00    0.52
relaxed      0.16        0.17       0.15 -0.08    -0.08  -0.07  -0.17   -0.28  -0.21  0.54    0.52    1.00
```

Cluster analysis

ICLUST



Factor analysis



Theory of arousal and performance

- EA varies diurnally
  - perhaps personality effects
- TA varies in response to stress
  - perhaps personality effects
- EA and TA affect performance in a complex manner