DOCUMENT RESUME

ED 120 085 SO 009 017

AUTHOR Costin, Frank; And Others
TITLE Introduction to Psychology: Syllabus and Study Guide. Spring 1976 Edition.
PUB DATE 76
NOTE 171p.
AVAILABLE FROM Stipes Publishing Company, 10-12 Chester Street, Champaign, Illinois 61820 ($4.90, 10 percent discount on bulk orders)

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS Behavioral Objectives; Cognitive Objectives; Course Content; Curriculum Guides; Educational Resources; Higher Education; Instructional Materials; Learning; Learning Motivation; Personality; *Psychology; Social Sciences; Teaching Techniques; Thought Processes

ABSTRACT

The syllabus contains detailed information concerning an introductory college course in psychology. The primary objectives are to help the student acquire basic knowledge of vocabulary, concepts, methods and theories used by psychologists, and skills in interpreting psychological knowledge and applying it to daily life, everyday problems, and social issues. The study guide presents instructional activities such as videotape presentations, self-study topics, supplementary readings, and a description of the psychological investigations which are to be undertaken outside of class time as a regular part of the required course work. The course is divided into eight units on the Nature of Psychology, Learning and Memory, Thinking, Motivation and Emotion, Intelligence, Personality and Adjustment, Behavior Disorders, and Social Interaction. Appendices include references for further study, suggested supplementary readings, and sample test items. (Author/DDB)

Frank Costin

INTRODUCTION TO PSYCHOLOGY

Syllabus and Study Guide

Spring 1976 Edition

Frank Costin

in collaboration with

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William T. Greenough

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University of Stirling, Scotland

SP009017

Published By
STIPES PUBLISHING COMPANY
10 - 12 Chester Street
Champaign, Illinois 61820

About the authors.....

Frank Costin works in the areas of abnormal, personality, and social psychology; he was formerly at the University's Psychological and Counseling Center.

Don E. Dulany specializes in higher mental processes; he is particularly involved in the study of thinking, problem-solving, and language development.

William T. Greenough works in the areas of physiological psychology, memory processes, and related aspects of developmental psychobiology.

David A. Lieberman specializes in experimental psychology, with emphasis on animal and human learning. Formerly at the University of Illinois, he now teaches at University of Stirling, Scotland.

TABLE OF CONTENTS

OBJECTIVES

This course is an introduction to psychology as a social-behavioral science; and is designed to help you acquire knowledge of the:

- vocabulary and concepts involved in describing and explaining psychological phenomena
- basic methods used by psychologists in their investigations of phenomena
- principles, theories, and other empirical generalizations which have emerged from psychological investigations

and to help you acquire skills in:

- interpreting psychological knowledge and applying it to daily life, everyday problems, and social issues.

SCHEDULE OF CLASS MEETINGS

Sections on the Monday-Wednesday-Friday sequence meet for 50 minutes each of those days. Sections on the Tuesday-Thursday sequence meet for 75 minutes each of those days. (See pages 6-9).

ACTIVITIES

VIDEOTAPE PRESENTATIONS

The videotapes are designed to:

- illustrate how psychologists gather information and answer questions
- demonstrate and interpret concepts, principles, and other empirical generalizations
- promote discussion of psychological phenomena, and especially their relevance to your own experiences and behavior.

The videotapes are controlled by the Section Instructor, since playback equipment is located in the same room where the class meets. This arrangement permits a great deal of flexibility. For example, the Section Instructor can:

- point out certain features to watch for before the videotape is presented, and explain how it is related to reading assignments and to previous presentations
- stop the videotape at various points, or replay certain portions
- give brief quizzes over previous work before the class gets involved in the new presentation.

The Syllabus and Study Guide contains outlines, notes, and a variety of other cues to help you follow the videotapes, and thus be better prepared to discuss and understand them.

- Experiments and other studies are described in sufficient detail to enable you to follow procedures, results, and interpretations without getting unduly involved in routine copying of information.
- Definitions and technical vocabulary are printed within the outline.
- Diagrams, charts, tables, and graphs presented in the videotapes are also reproduced within the outlines; thus you can more easily react to and comprehend this information.
- Guiding questions and programing devices are used to help you understand and remember what is being presented.
- The right hand side of each page is blank, so that you can take your own notes, jot down questions you wish to ask, and keep a record of other ideas you want to pursue.

Accompanying each outline is a series of "Questions and Problems for Study and Discussion".

- These "Questions and Problems" are concerned mainly with interpreting and applying basic concepts, principles, and other empirical generalizations.
- Sometimes they try to help you summarize essential points in the videotapes, and integrate them with reading assignments.
- Study the "Questions and Problems" systematically as you proceed through the course. Discuss them in class.
- They will also be used as a basis for some of the items on the midsemester examination and the final examination; and your Section Instructor may use them for quizzes, or for special projects.

SELF-STUDY TOPICS

Some of the content of the various Units is presented by means of Self-study Topics. They include reading assignments, guidelines for studying them, and certain material prepared specifically for this course. A number of class sessions have been designated for reviewing and discussing these Self-study Topics.

READING ASSIGNMENTS

Specially selected reading assignments in the following textbook accompany the videotape presentations and Self-study Topics:

Morgan, C. T. and King, R. A. Introduction to psychology (5th edition). New York: McGraw-Hill, 1975.

PREVIEW OF "QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION".

Before the showing of each videotape you should preview the "Questions and Problems" in the Syllabus. The page number for each set of "Questions and Problems" is noted immediately after the READING ASSIGNMENT.

SUGGESTED SUPPLEMENTARY READINGS

Appendix B contains a list of Suggested Supplementary Readings. They are in the Undergraduate Library, and are also available in the campus bookstore.

- These readings have been selected mainly for the student who wishes to explore certain topics more deeply or widely, and perhaps to develop special projects. Your Section Instructor will be glad to talk with you about your plans.

OTHER ACTIVITIES

Your Section Instructor is responsible for initiating a variety of other activities. These may include:

- quizzes to assess your understanding of content presented in videotapes, self-study topics, and reading assignments. These quizzes can help you discover how well you are learning, and help correct erroneous ways of thinking.
- individual or group projects
- special demonstrations involving group participation
- critical analyses of articles or books
- analysis of a psychological problem
- design of a psychological study

PSYCHOLOGICAL INVESTIGATIONS OUTSIDE OF CLASS

A regular part of your required work in the ccurse involves participating as a subject in experimental or other psychological studies.* The specific tasks will be explained by the individual investigator, a member of the Department of Psychology.

- By participating in these investigations you will gain direct experience concerning the kinds of problems psychologists try to solve, how they gather their data, and other aspects of psychological research.
- You will also be providing valuable assistance to the investigators, who depend on your cooperation for the successful completion of their projects.
- Procedures for scheduling your participation are explained in Appendix D.
- The Department of Psychology conducts these studies in accordance with the ethical principles and procedures established by the University Research Board, as published in the Graduate College bulletin: "The Use of Experimental Human Subjects at the Champaign-Urbana Campus." If you find the procedures of an investigation violate your moral, religious, or ethical conviction, you have the right not to participate. You will not be penalized for conscientious refusal.

*NOTE: If you are enrolled in Psychology 101 ("Theory and Practice of Psychological Research") you will be exempt from this requirement, since that course also involves participating as a subject in psychological investigations outside of class.

EVALUATION OF COURSE WORK

1. Midsemester examination: Units I - V (See "Guide", page 66).

2. Final examination: Units VI - VIII (See "Guide", page 153).

   - The examinations will be based on videotape presentations; reading assignments; "Questions and Problems for Study and Discussion"; and "Self-study Topics."

   - Appendix C illustrates the types of items to be included in the examinations. Items are classified according to the objectives they measure.

3. Evaluation by Section Instructor. Your Section Instructor will discuss with you the procedures to be used (See "Other Activities", page 4).

4. Participation in psychological investigations outside of class: (See p. 4 and Appendix D).

The following system will be used to determine your grade for the course:

		Maximum possible points
1.	Midsemester examination	70
2.	Final examination	100
3.	Evaluation by Section Instructor	70*
4.	Participation in psychological investigations outside of class (automatic if enrolled in Psy. 101)	10
	Total =	250

Your grade for the course will be calculated as follows:

1. The total number of points for each student is computed.

2. A frequency distribution of these total points is prepared for each Section Instructor's students, and the upper 10% of the distribution is determined.

3. The MEAN of this upper 10% is computed.

4. Grades for the course are then assigned as follows:

   Lower limit of A = 95% of the MEAN
   Lower limit of B = 85% of the MEAN
   Lower limit of C = 75% of the MEAN
   Lower limit of D = 65% of the MEAN
   } of the upper 10%.

* NOTE: There are no "extra credit" points in this course. However, section instructors may vary their assignments to provide individual flexibility in how the 70 points are earned.

SCHEDULE
for
MONDAY-WEDNESDAY-FRIDAY SEQUENCE

INTRODUCTION TO THE COURSE	Mon.	Jan.	19
UNIT I. THE NATURE OF PSYCHOLOGY			
1. Psychology As A Science	Wed.	Jan.	21
2. Methods of Investigation	Fri.	Jan.	23
UNIT II. LEARNING AND MEMORY			
3. Classical Conditioning	Mon.	Jan.	26
4. Operant Conditioning	Wed.	Jan.	28
	Fri.	Jan.	30
5. Verbal Learning	Mon.	Feb.	1
6. Memory and Forgetting	Wed.	Feb.	4
	Fri.	Feb.	6
UNIT III. THINKING			
7. Tools of Thought	Mon.	Feb.	9
	Wed.	Feb.	11
8. Problem Solving	Fri.	Feb.	13
	Mon.	Feb.	16
9. The Nature of Communication	Wed.	Feb.	18
UNIT IV. MOTIVATION AND EMOTION			
10. Biological Foundations of Motivation	Fri.	Feb.	20
	Mon.	Feb.	23
11. Cognitive Sources of Motivation	Wed.	Feb.	25
	Fri.	Feb.	27
12. Emotion	Mon.	March	1
	Wed.	March	3

No classes Friday, March 5
MIDSEMESTER EXAMINATION: Units I - IV
Wednesday, March 3, 6:30 P.M. (rooms to be announced)
See "Guide to Midsemester Examination", page 66

UNIT V. INTELLIGENCE

13.	Measuring Intelligence	Mon.	March 8
14.	Interpreting and Using the Results of Intelligence Tests	Wed. Fri.	March 10 March 12

UNIT VI. PERSONALITY AND ADJUSTMENT

15.	Freudian Theory of Personality	Mon. Wed.	March 22 March 24
16.	"The Conscience of A Child"	Fri.	March 26
17.	Development and Behavior during Childhood: Other Views	Mon.	March 29
18.	Describing Personality: Types and Traits	Wed.	March 31
19.	Personality Tests	Fri.	April 2
20.	Adjusting to Conflict	Mon.	April 5
21.	Adjusting to Frustration	Wed.	April 7

UNIT VII. BEHAVIOR DISORDERS

22.	Neurotic Behavior	Fri. Mon.	April 9 April 12
23.	Psychotic Behavior	Wed. Fri.	April 14 April 16
24.	Somatic and Psychodynamic Therapies	Mon.	April 19
25.	Reinforcement Therapy	Wed. Fri.	April 21 April 23

UNIT VIII. SOCIAL INTERACTION

26.	"The Social Animal"	Mon.	April 26
27.	Social Influences on Behavior	Wed.	April 28
28.	Social Perception	Fri.	April 30
29.	Social Attitudes and Prejudice	Mon. Wed.	May 3 May 5

FINAL EXAMINATION: Units V - VIII
Date, time, and rooms to be announced
See "Guide to Final Examination", page 153

SCHEDULE
for
TUESDAY-THURSDAY SEQUENCE

INTRODUCTION TO THE COURSE	Tues.	Jan.	20
UNIT I. THE NATURE OF PSYCHOLOGY			
1. Psychology As A Science	Thurs.	Jan.	22
2. Methods of Investigation	Tues.	Jan.	27
UNIT II. LEARNING AND MEMORY			
3. Classical Conditioning	Thurs.	Jan.	29
4. Operant Conditioning	Tues.	Feb.	3
5. Verbal Learning	Thurs.	Feb.	5
6. Memory and Forgetting	Tues.	Feb.	10
UNIT III. THINKING			
7. Tools of Thought	Thurs.	Feb.	12
8. Problem Solving	Tues.	Feb.	17
9. The Nature of Communication	Thurs.	Feb.	19
UNIT IV. MOTIVATION AND EMOTION			
10. Biological Foundations of Motivation	Tues.	Feb.	24
11. Cognitive Sources of Motivation	Thurs.	Feb.	26
12. Emotion	Tues.	March	2

No classes, Thursday, March 4
MIDSEMESTER EXAMINATION: Units I - IV
Wednesday, March 3, 6:30 P.M. (rooms to be announced)
See "Guide to Midsemester Examination", page 66

UNIT V. INTELLIGENCE			
13. Measuring Intelligence	Tues.	March	9
14. Interpreting and Using the Results of Intelligence Tests	Thurs.	March	11

UNIT VI. PERSONALITY AND ADJUSTMENT

15.	Freudian Theory of Personality	Tues.	March 23
16.	"The Conscience of A Child"	Thurs.	March 25
17.	Development and Behavior during Childhood: Other Views	Tues.	March 30
18.	Describing Personality: Types and Traits	Thurs.	April 1
19.	Personality Tests	Tues.	April 6
20.	Adjusting to Conflict	Thurs.	April 8
21.	Adjusting to Frustration		

UNIT VII. BEHAVIOR DISORDER

22.	Neurotic Behavior	Tues.	April 13
23.	Psychotic Behavior	Thurs.	April 15
24.	Somatic and Psychodynamic Therapies	Tues.	April 20
25.	"Reinforcement Therapy"	Thurs.	April 22

UNIT VIII. SOCIAL INTERACTION

26.	"The Social Animal"	Tues.	April 27
27.	Social Influences on Behavior	Thurs.	April 29
28.	Social Perception	Tues.	May 4
29.	Social Attitudes and Prejudice	Thurs.	May 6

FINAL EXAMINATION: Units VI - VIII
Date, time, and rooms to be announced
See "Guide to Final Examination", page 153

UNIT ONE
The Nature of Psychology

Professor Frank Costin

1. Psychology As A Science

READING ASSIGNMENT*: xv-xvi; 2-13. Preview "Questions and Problems", p. 15.

I. Psychologists in action: Demonstrations

II. Definition of psychology: "Science which describes and explains behavior and experiences of organisms."

III. Analysis of key terms in definition

A. Behavior: meaning and demonstrations

1. External

2. Internal

3. Special note on animal behavior

Matter of interest in its own right.

Cues about human behavior.

Demonstration

Convenience and safety

Demonstration

* All reading assignments refer to pages in Morgan and King, Introduction to psychology (5th Edition), 1975.

B. Experiences

1. Subjective: studied indirectly (self-observation) (self-report) (introspection)

2. Demonstration

C. Describes

1. Systematic observation

2. Classification

3. Empirical relationships (depend on observation)

4. Basic kinds of empirical relationships

a. Meaning of S-O-R (fill in blank spaces)

S = _____

O = _____

R = _____

b. Illustrative examples: demonstrations

S-R

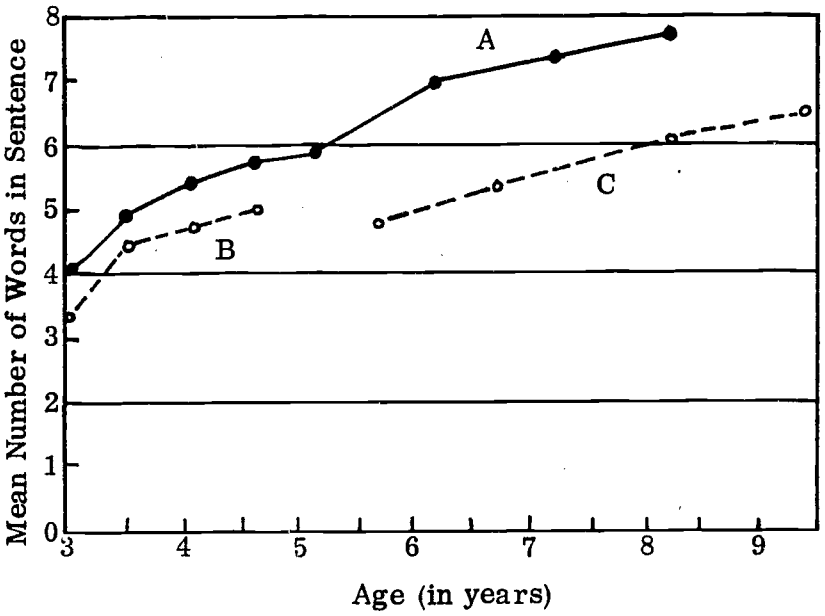
S	R	1000 children	1000 adults
DARK	night	42%	22%
	light	4%	42%
SOFT	pillow	14%	5%
	hard	3%	37%

R-R

Anxiety group	No. anagrams solved		
	Total	Easy	Hard
Low	273		
High	235		

Insert remaining data

O-R



compare the curves

5. Conclusions

D. Explains

"Explanation" also involves empirical relationships, but more complex and far-reaching than "description."

(See ADDENDUM)

ADDENDUM

Explaining and Predicting Behavior and Experiences

In the simplest sense, a psychological "explanation" is answering the question "Why?" about some phenomenon. But from a scientific viewpoint, this "why" becomes a more complex extension of empirical relationships. That is because the psychologist, after describing empirical relationships, seeks to answer questions like these:

- Do they occur regularly?
- What do they mean?
- Can they be predicted?
- Can they predict other relationships not yet observed?

The more frequently one can answer "yes" to these questions, the better the phenomena have been "explained," i. e., the better one can establish principles, and make predictions.

- General observations, plus intuitive hunches, may suggest a particular hypothesis about an empirical relationship. That is, one makes a tentative prediction about an empirical relationship.
- To test this hypothesis it is necessary to contrive a situation in which one can make specific and systematic observations, and thus see whether or not the predicted relationship will occur. (One may also seek these relationships in "natural" situations one can observe systematically).
- As the result of these observations one may accept the hypothesis, and thus claim evidence toward establishing a principle. One may want to repeat the observations, or have other investigators do so, to see if the hypothesis can be consistently confirmed.
- On the other hand one may reject the hypothesis because the systematic observations do not fit the hypothesis. In that case, one may reexamine the original "intuitions" and "general observations" that led to the hypothesis, looking for flaws in that process. Or, one may reexamine the hypothesis, and ways of testing it. Perhaps there were flaws there.
- As a result of these analyses, one may decide on alternative hypotheses to test, or new ways of testing the original hypothesis.
- In testing hypotheses one may discover information and relationships not originally anticipated; such discoveries may lead to new hypotheses, and new situations in which to test these hypotheses.

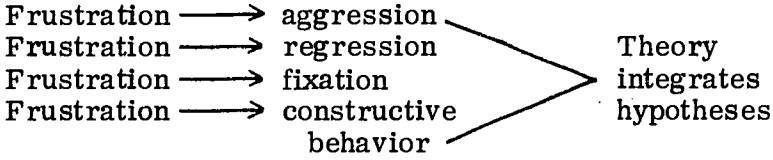
To illustrate how the above process works, consider this hypothesis: "Frustration leads to aggression." On the basis of general observations and intuition, psychologists have been impressed by the plausibility of this relationship, and a number of experiments have supported it. However, studies have also shown that while frustration may lead to aggression, and frequently does, it may also produce other kinds of reactions, depending on the particular situation and the nature of the individuals involved.

For example, each of the following hypotheses has been tested under a variety of conditions:

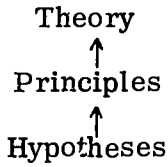
- Frustration leads to aggression.
- Frustration leads to regression.
- Frustration leads to fixation.
- Frustration leads to constructive behavior.

And each of them has, under certain conditions, been accepted. Psychologists have spent a great deal of time trying to discover the relationship between such hypotheses: Under what conditions can they be accepted? Under what conditions do they not hold up? Answering these questions helps develop a theory of frustration. The videotape "Adjusting to Frustration" discusses these matters in more detail. (See p. 124).

- A theory integrates hypotheses and principles. Therefore it is a more generalized explanation than a hypothesis or a principle.



- A theory represents a higher level of explaining and predicting behavior and experiences.



QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. How does the definition of psychology presented in the videotape differ from "everyday" definitions? How does the use of the term "behavior" differ from more "everyday" uses?

2. Refute this statement: "It is more 'scientific' to study animal behavior than to study human behavior".

3. What are some of the pitfalls in using "self-report" data when investigating human behavior? How can a psychologist guard against these dangers?

4. What is an "empirical relationship"?

5. Give examples, other than those used in the videotape presentation, to illustrate the following "empirical relationships": S-R, R-R, O-R.

6. "Psychologically speaking, there is no R without S, no S without O." What does this statement mean? Cite some examples to illustrate your explanation.

7. What is the difference between a "hypothesis" and a "principle"? A "principle" and a "theory"? Give specific examples to illustrate these differences (use examples other than those given in the Addendum).

8. Why is "controlled observation" an essential part of psychological investigations?

9. Is it possible to carry out a good psychological "experiment" without using a separate "control group"? Explain.

10. Review the material in the Addendum. How can one apply the procedures to "solving problems" in everyday situations?

11. Give an example to illustrate how in testing hypotheses "the psychologist may discover information and relationships not originally anticipated?" How can such discoveries lead to new hypotheses?

2. Methods of Investigation

READING ASSIGNMENT: 13-26. Preview "Questions and Problems", p. 19.

I. Experimental method

A. Demonstration: effect of alcohol on memory of stories

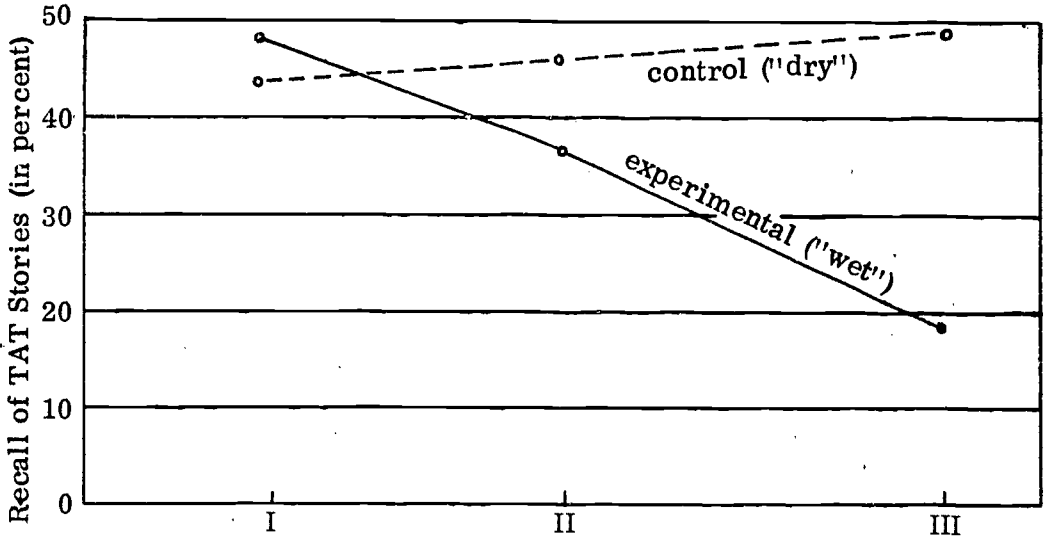
1. Procedures (re-created, based on experimenter's report).

Subjects divided into two groups: experimental (attended party, liquor served); control (attended party, only soft drinks served).

TAT administered to both groups: before drinking, after 25 minutes of drinking, and after an additional 25 minutes of drinking (TAT pictures different for each of these three times).

Subjects called back next day, shown same pictures, asked to recall stories told day before.

2. Results and interpretation



I = before drinking; II = after 25 minutes of drinking; III = after an additional 25 minutes of drinking

Independent variable = **S**timulus manipulated by experimenter = "cause" (alcohol)

Dependent variable = **R**esponse of subjects = "effect" (recall of stories)

3. How "modern" is the concept of a control group? An anecdote from Athenaeus

4. Some limitations of the experiment

   As control increases, so does "artificiality" of experiment--especially in laboratory.

   Note examples presented

II. Survey method

A. Public opinion poll (Minnesota)

1. People asked during interview: How much do you smoke? Tried to quit? Successful? etc. Then: "Do you think the relationship between cigarette smoking and cancer has been proven or not proven?"

2. Results and interpretations

1. What was the relationship between smoking and belief in its "linkage" to cancer?

Group	thought linkage proven (%)	
	Public Opinion Poll (Minn.)	Questionnaire (Ariz.)
Non-smokers	29	37
Light smokers	20	26
Heavy smokers	7	21

B. Similar survey (U. of Arizona): questionnaires instead of interviews. Compare with Minnesota Poll results.

C. Why do data, in both surveys, illustrate R-R relationship? (Caution: Note that data do not demonstrate direct cause and effect relationship).

D. How do data support theory of cognitive dissonance?

III. Clinical methods

A. Scientific goals

1. Integrate observations about an individual

2. Discover empirical relationships as revealed by the individual

3. Characteristics studied by clinical interviews

4. How do clinical interviews compare with survey interviews?

Scope?

Depth?

Purpose?

5. Illustrations of clinical interviews

College student (interview re-created, based on an actual case study)

Child (Tulane University)

IV. Naturalistic observation

A. Meaning

B. Observations of children at play (University of Illinois, School of Human Resources and Family Studies)

Naturalistic observation can play an important part in developing and testing hypotheses, and can also be useful in correcting or checking against empirical generalizations obtained by using other methods of investigation.

*Can you think of a particular hypothesis that might be tested in the kinds of situations you have seen at this nursery school?

*What advantages might there be in using naturalistic observation to test your hypothesis, as compared to other methods of investigation?

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. "Responses to stimuli may in turn become stimuli influencing later responses." Explain this statement. Give concrete examples to illustrate your explanation.

2. How does an experimenter decide what should be "controlled" and what need not be "controlled"?

3. "As control increases, so does the "artificiality' of the experiment--especially in the laboratory." Give examples (other than those mentioned in the videotape) to support this statement.

4. What are the main ways in which survey methods differ from experimental methods? Give examples.

5. Is the survey approach to investigating behavior less "scientific" than experimental methods? Explain your answer.

6. Why are relationships which may emerge from survey data not necessarily "cause-and-effect" relationships?

7. Can data derived from clinical methods ever serve a broader function than describing and explaining the behavior of a single individual? Explain your answer.

8. What are the advantages in using naturalistic observation?

9. What are some disadvantages?

10. What cautions should be used in gathering data through naturalistic observation?

UNIT TWO

Learning And Memory

Professor William T. Greenough
Professor David A. Lieberman

3. Classical Conditioning

READING ASSIGNMENT: 96-104. Preview "Questions and Problems", p. 24.

I. Basic involvement of learning in everyday life

II. Classical conditioning

A. Pavlov's experiments

Salivation occurred at sight of food

Dogs associated food dish with food

Ability to form associations between events is fundamental to learning

B. Elements of Pavlovian (classical) conditioning

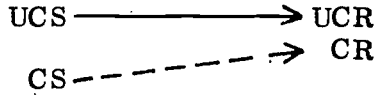
Unconditioned Stimulus (UCS) (food)

Unconditioned Response (UCR) (salivation) (unlearned)

Conditioned Stimulus (CS) (bell)

Conditioned Response (salivation)

Diagram of Classical Conditioning



[Note: CR, not shown on screen, resembles UCR (in this case "salivation"). But CR need not be identical to UCR. Why? Discuss after videotape presentation.]

B. The conditioned emotional response (CER)

1. Galvanic skin response (GSR)--an electrical measurement of perspiration which reflects emotion

   GSR may be classically conditioned

   Example: Sailor's GSR to "battle stations" alert

2. Conditioned emotional responses in rats

   a. Rats trained to work for reward

   b. Pair tone with shock in another environment

   c. Tone interrupts rat's working for food

C. Classical conditioning and emotion

1. Fear is often classically conditioned

2. Classical conditioning as a technique used in therapy

   a. Rationale

   b. Note how muscle groups are considered individually

   c. Conditioned relaxation can be applied in desensitizing the subject towards previously fear-evoking event.

D. Some basic principles of classical conditioning

1. The temporal relation of CS and USC.

   a. Conditioning is strongest when CS immediately precedes UCS

   b. Demonstration - Immediate and delayed UCS presentation in GSR conditioning

2. Intensity of the UCS

   a. A stronger UCS will usually give stronger conditioning

   b. Demonstration - Shock intensity in CER

3. The nature of the CS: Biological specificity

   a. Original notion: Exact nature of CS unimportant as long as organism can detect it.

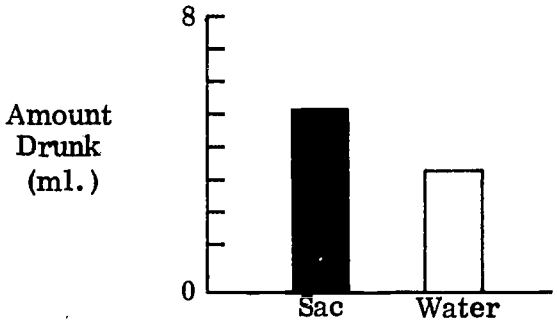
   b. Recent research: The nature of the CS makes a difference in conditioning

   c. Demonstration - (turn to next page)

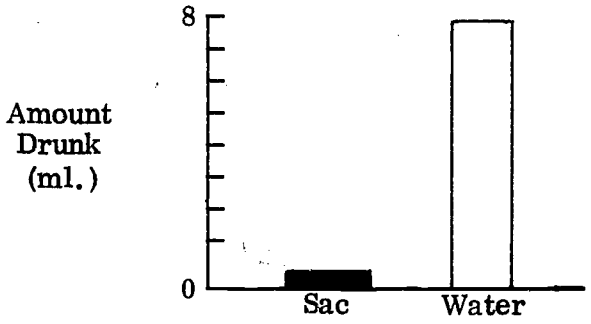
Demonstration: Conditioning of nausea in rats.

1. Rats normally prefer saccharin solution to water
2. After drinking saccharin, rat is injected with apomorphine, which produces nausea
3. Later--rat avoids saccharin, but drinks water

Before



After



4. However, if noise or light used in place of tasting saccharin, conditioning does not occur.
5. Conclusion: Organisms may be biologically predisposed to associate some types of CS with some types of UCS, but not others.

e.g.

Rat can associate saccharin with nausea, and tone with shock; but not saccharin with shock or tone with nausea.

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Early in the videotape presentation, responses such as skin resistance changes (sweating) were said to be used in "lie detection", and it was implied that these responses to lying were a result of classical conditioning.

   a. Can you suggest what CS and UCS events might have originally been involved in this conditioning?

   b. What sorts of responses by the subject to a lie detector test might interfere with the test?

2. Which of the following might have resulted from a classical conditioning process?

   a. A child's dislike of spinach.
   b. A rat's turning to the right in a maze to find food.
   c. A man's fear of heights.
   d. Preference for Beethoven over Schoenberg.
   e. The ability to drive an automobile.
   f. Addiction to a drug.

   Can you suggest a probable CS and UCS for each case which you have included?

3. Overindulgence in alcohol often results in a type of illness---especially the following morning. Yet aversion to alcohol seems quite rare, while addiction is far too frequent. Can you suggest reasons why the biologically specific learning we saw in rats does not develop in this case?

4. Operant Conditioning

READING ASSIGNMENT: 104-120; 120-136. Preview "Questions and Problems", p. 28.

I. Reinforcement

Illustration

A. Reinforcement defined: presentation of a reward after a response.

Primary reinforcement (requires no special training)

Delayed reinforcement

Delay may retard learning

Demonstration: Rats do not learn to barpress if reinforcement is delayed by 10 seconds

B. Kinds of reinforcers

1. Primary reinforcers: innate rewards requiring no training

Examples: food, novelty

2. Secondary reinforcers: learned reinforcers

Example: money

3. ICS: intracranial self-stimulation

Demonstration: Rats barpress to obtain small electrical shocks in certain areas of brain

Implications

II. Punishment

Definition: presentation of an aversive event after a response

Demonstration: Rat stops barpressing if shocked

A. Desirable effects of punishment

B. Undesirable effects: Produces fear and aggression

Demonstration: Rats which were initially friendly fight when shocked

28

III. Extinction

Definition: withholding reinforcement for a previously rewarded response

A. Advantage: no undesirable side effects as in punishment.

B. Disadvantages

1. Sometimes impractical
2. Time consuming

C. Effects of reinforcement schedules

CRF (continuous reinforcement): reward after every response

FR2 (fixed ratio 2): reward after every second response

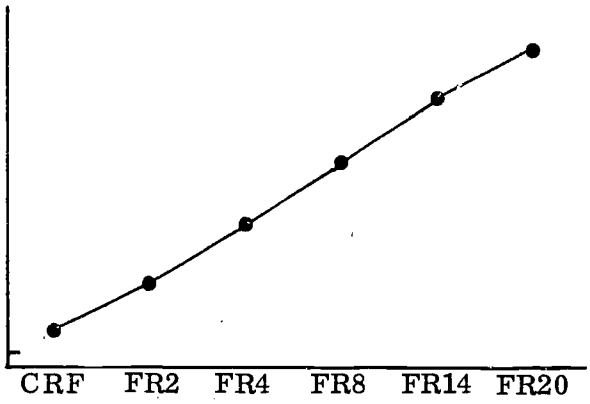
FR4 (fixed ration 4): reward after every fourth response

etc.

(see below)

Prediction

Results



Partial reinforcement during training increases responding during extinction

Explanation: Continuous reinforcement makes it easier to detect (discriminate) the change in conditions, and so the subject soon stops responding. Intermittent reinforcement in training makes it harder to realize that reinforcement is no longer available.

IV. Operant Conditioning

Definition: Learning due to a contingency between a response and an event

A. Practical problems of control

1. Complexity of principles: Most behaviors have several different consequences; net result may be hard to predict

2. Failure to use principles

B. Practical application: training retarded adolescents

1. Shape response gradually

2. Use immediate, primary reinforcement initially

3. Use of intermittent (partial) secondary reinforcement (tokens)

C. Evaluation: Dr. Rudy Breitmeyer, Adolph Meyer Zone Center, Decatur, Illinois.

PACE (token economies)

Operant conditioning not the only possible technique, but it works well (70% success rate compared with 30% in traditional programs).

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Can you think of any of your habits or personality traits that your parents could have controlled better, using the principles of operant conditioning? Explain.

2. Is there any behavior you think can't be controlled by these principles? Explain.

3. Can you think of any specific instances in which schools or governments could make better use of these principles? Explain.

4. Is the use of punishment to control behavior immoral? Are all attempts to control behavior immoral? What determines the morality of the method (i.e., means)? Explain.

5. In his novel, "Walden Two", and in his more recent book, "Beyond Freedom and Dignity", B. F. Skinner argues that principles of reinforcement ("operant conditioning") can be used to shape people to do "good" things for society and to avoid doing "bad" things. The famous poet Stephen Spender has called Skinner's plan "A kind of facism without tears". What did he mean? Do you agree? Why?

6. Can "cognitive learning" (Morgan and King, pp. 120-125) be considered as a special aspect of "operant conditioning"? Explain.

5. Verbal Learning

READING ASSIGNMENT: 137-150; 165-168. Preview "Questions and Problems", p. 33.

I. Introduction

II. Illustrative experiment

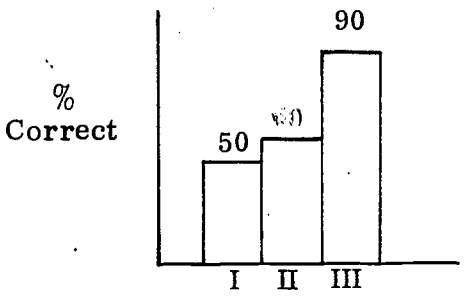
Free recall: Subject can recall the words from a list in any order

List One	Check if correct

List Two	Check if correct

List Three	Check if correct

Results (Miller and Selfridge)



Why this difference?

II. First factor: Words vary in difficulty

A. Coding

1. Don't store real word, but coded version

2. Initial code: based on sound of word even if word presented visually

3. Later code: based on meaning of word

4. Example: "night" might at first be confused with "bite", later with "evening."

B. Common examples

1. Daydreaming: hear words, but don't analyze meaning

2. "Tip of the tongue" phenomenon

Experiment (Brown and McNeill)

Procedure: read subjects definitions; if word was "on the tip of their tongues," asked them to answer questions about the word.

Number of syllables: 1.____ 2.____

First letter: 1.____ 2.____

Words sounding alike:

1._____

2._____

Results: Half the subjects knew some features of the word even though they couldn't identify it.

Conclusion: A word has many codes; we can retrieve some without others

C. Effects of practice

1. RGE: initially three independent letters

2. With practice could become a functional unit, like BAT or TWA

D. Conclusion

List 2 easier than list 1, because more common words: easier to code and retrieve.

III. Second factor: Organization

A. Association: a bond between words so that thinking of one reminds you of the other

1. Examples

2. Associations develop through pairing of the words

3. Lists with associated words easier to remember

Experiment

List One	Check if correct	List Two	Check if correct
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____
_____	____	_____	____

Results: (Deese)

List 1 = 5.4 words
List 2 = 7.2 words

4. Conclusion

Associated words are easier to remember.

List 3 words more likely to have been associated than list 2 words

B. Grammar: rules determining word order

1. Grammar facilitates recall

2. Dramatic demonstration (Epstein)

Sentence 1: a vap koob desak the citar molent um glox nerf

(nonsense words)

Sentence 2: A vapy koobs desaked the citar molently um glox nerfs

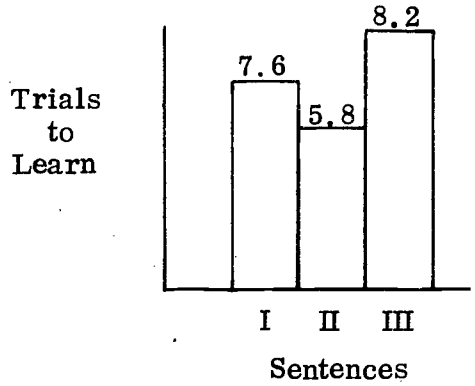
(nonsense words with grammatical tags)

Sentence 3: koobs vapy the desaked um glox nerfs a molently

(sentence 2 in random arrangement)

Prediction: If grammar facilitates learning sentence 2 should be easiest, even though Sentence 1 contains shorter words, and Sentence 3 has same words as Sentence 2.

Results



Conclusion: list difficulty not determined solely by its words. (lists 2 and 3 in Epstein's experiment had the same words), but by the relationship between them (in this case, grammar).

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. A word's code can depend on its sound or its meaning. Can you think of any other codes that you use?

2. Why might some codes require more time for processing?

3. Given the millions of different codes stores in the brain, how could a subject find a specific word he's looking for? Put another way, how would you design a machine to perform the same task?

4. Why do you think grammatical tags help us to remember nonsense words?

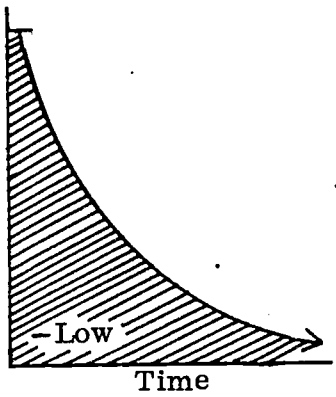
5. How do the principles involved in learning motor skills (Morgan and King, pp. 165-168) differ from those of verbal learning? What principles of learning do they share?

6. Memory and Forgetting

READING ASSIGNMENT: 150-165; Summary, pp. 168-170. Preview "Questions and Problems", p. 39.

I. Forgetting

A. Amount remembered declines over time.



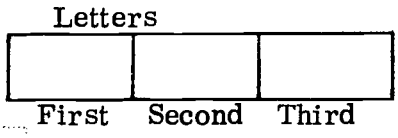
1. Peterson and Peterson experiment.

a. Subject hears 3 letters (JPI), and then a number (319)

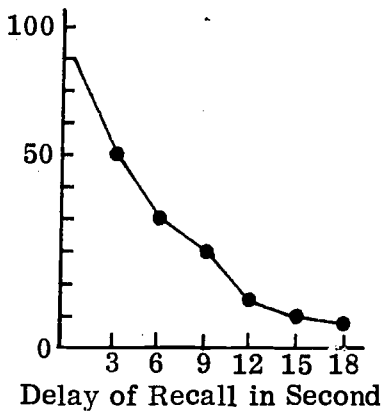
b. Counts backwards by threes from that number

c. Recalls letters

Your trial:



Peterson & Peterson's results



2. Two types of memory

   a. Short-term memory -

      How long does it last?

   b. Long-term memory -

   c. Illustration of decay in short-term memory

3. Explanations of decrement in memory over time:

   a. Decay

      Memories "fade" over a period of time

      Rehearsal renews memories; counting backwards interferes with rehearsal

   b. Interference

      Prior and future memories interfere with present memory

      Interference greatest between very similar memories - least between very different memories

   c. Short-term decay and long-term interference

      Short-term memory--rapid decay

      Long-term memory--little decay but more interference

      Unusual memories - less interference

      Common memories - much interference

II. Physiological studies of memory

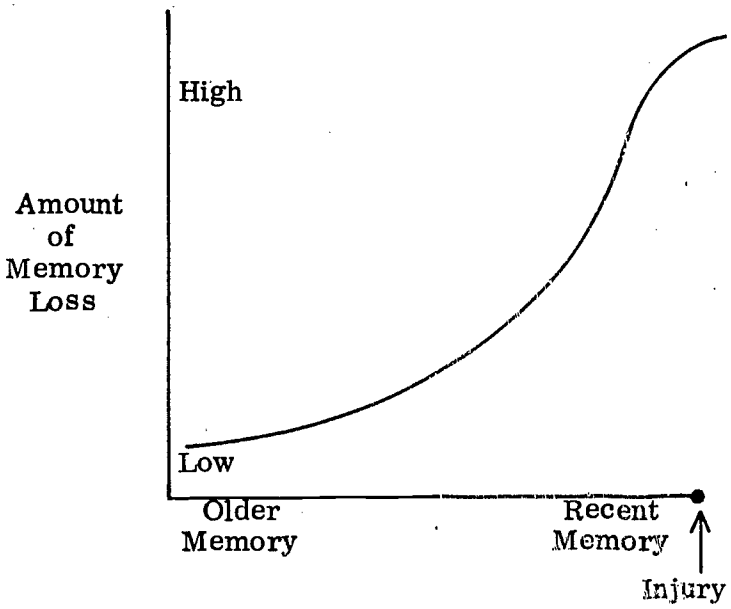
Basic question - how does memory work in the brain?

A. Consolidation--formation of a permanent memory takes time

1. Retrograde amnesia from concussions

Recent memory sometimes lost permanently

Older memory gradually returns



Recent memories not firmly fixed--(i.e., consolidated) --so lost

Older memories fixed (consolidated)--so retained

2. Retrograde amnesia from anesthetic treatments

Demonstration: One-trial avoidance learning task

a. Rat trained to stay on platform to avoid shock

b. Rats placed in box and anesthetized with CO_2

c. Rats tested for memory

Results

a. Rat given training showed memory of shock

b. Rat anesthetized immediately did not remember shock

c. Rat anesthetized after delay remembered shock

Why?

3. Other treatments which disrupt memory consolidation

a. Electroconvulsive shock

b. Drugs

4. Facilitation of memory

Drugs can improve memory consolidation

e.g., caffeine

B. The search for physical changes associated with memory

1. Pavlov's theory

Memory depends on connections between brain areas of CS and UCS

Physical changes in brain difficulty to find

2. An alternative approach (Rosenzweig)

Search for accumulated effect of many memories

"Enriched environments" versus "impoverished" environments

Effects of enriched rearing on behavior of animals

a. Did better on learning tasks

b. Some parts of the brain became larger

c. Changes in nerve cells and chemicals in brains

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. If you believed in an interference theory of forgetting, how might you pattern your studying for maximum efficiency? What if you believed in a decay theory (aside from studying the night before the exam)?

2. List some memories which you feel would be subject to relatively little interference, and some which would be particularly susceptible to inference.

3. Can you think of some socially relevant implications of the enriched environment research?

4. There are some situations where an interference theory and a consolidation theory might make very similar predictions for memory of an event followed rather rapidly by another event. What differential predictions would the two theories make?

UNIT THREE

Thinking

Professor Don E. Dulany

7. Tools of Thought

READING ASSIGNMENT: 174-180. Preview "Questions and Problems", p. 45.

I. Introductory remarks

Why is thinking a challenge to our understanding?

Complexity. Many complexly related states and operations of mind. A way of processing and transforming information.

Variety. Ranges from deductive and inductive thinking of scientist to phantasy of psychotic.

Privacy. Must find ways to penetrate privacy.

II. Imagery

A. Nature of images

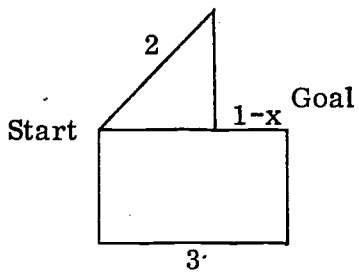
Conscious representation of an object with a symbol that resembles the object in some way.

B. Illustrative use of imagery in problem-solving.

Image: 3' x 3' x 3' cube composed of 1' x 1' x 1' cubes. Large cube is painted yellow on outside. Problem: How many of the smaller cubes are painted yellow on

three sides? _____
two sides? _____
one side? _____
no sides? _____

C. Question of imagery below man



Animal learns to run alley 1, then alley 2, then alley 3 from start to goal. Animals are known to prefer shortest route to goal. In critical test, alley 1 is blocked at X. If animal is capable of imagery, if he possesses an imagined map of the maze, he should, after encountering the block, return to the start and take alley 3 rather than alley 2.

Conclusions based on many experiments of this type:

1. Some simple imagery is found in lower animals.

2. The higher the animal in the evolutionary scale, the greater the capability for imagery. Man possesses the greatest capability for imagery.

3. Persons vary in their capability for manipulating images in problem solving. This capability is a dimension of intelligence measured on common intelligence tests.

D. What does superior capability for imagery permit to man?

1. Greater ease in representing the "not-here" and "not-now."

2. Greater facility in solving problems.

3. Greater facility in learning and remembering arbitrary associations.

4. Greater facility in phantasy.

II. Concepts

A. Nature of concepts

A rule of categorization that organizes the world of experience into sames and differents.

B. Common kinds of conceptual rules

1. Equivalence rule: some range of attribute values are accepted as members of the same category.
2. Conjunctive rule: two or more attributes must be present for an event to be accepted as a member of the category.
3. Disjunctive rule: at least one of two or more attributes must be present for an event to be accepted as a member of the category.
4. Relational rule: two or more attributes must be in some specified relation for an event to be accepted as a member of the category.

C. The question of conceptualization below man

In a common type of experiment, animal demonstrates possession of the relational concept of "two-ness" by learning to reach for two objects, rather than one, regardless of the nature or position of the objects.

Conclusions based on many experiments of this type:

1. Some simple conceptual thinking is found below man.
2. Facility and complexity of conceptual thinking increase as you go higher in the evolutionary scale. Man is capable of the greatest facility and complexity of conceptual thinking.
3. Persons vary in their capability for conceptual thinking. This, too, is a dimension of intelligence. Example from intelligence tests:

LUBE NEREG LEPPUR THASER

7, 11, 15, 19 ____

6, 8, 12, 20 ____

4, 6, 10, 18 ____

D. What does superior capability for conceptualization permit to man?

1. Reduces the complexity of the environment.

2. Permits us to anticipate what a new thing is called.

3. Permits us to respond to some new event without the necessity of new learning.

4. Allows us to anticipate how a new object will behave.

5. Allows us to generalize solutions to new problems from old problems with the same relational structure, once we have found the common solution rule.

III. Propositions

A. Nature of proposition

A proposition asserts some relation between images, or concepts, or image and concept. May be true or false and believed in any degree. A sentence may express a proposition but is not the proposition itself, which may be expressed in a number of alternative sentences.

B. Common type of experimental study of propositional thinking

On each trial, subject selects and reads one of these words from card. If subject selects the word with the more active or dynamic meaning the experimenter says "good". Rate of selection of active words is increased if the subject can learn, or already believes, certain propositions: Active words (subject) are followed by "Good" (predicate). "Good" (subject) means I have said what I am supposed to say (predicate). Active words (subject) are what I am supposed to say (predicate) follows by inference.

C. Questions of propositional thinking below man.

1. Uncertain whether propositional thinking exists below level of man because it is difficult to investigate where subjects are incapable of propositional reports.

2. Propositional thinking is found at the level of man.

3. Persons vary in the facility and complexity of propositional thinking, as shown by tests of reasoning in common intelligence tests.

D. What does propositional thinking permit to man?

1. Permits man to solve problems by putting ideas--images or concepts --into relations.

2. Thinking may be independent of verbal forms, and hence more flexible.

3. Permits inferences among propositions.

Together these capabilities permit theorizing about the world--about scientific issues, social issues, and personal issues. Propositions are centrally involved in the higher forms of thought.

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Distinguish among images, concepts and propositions, as they are described in the videotape presentation.

2. Consider one benefit of a superior capability for imagery--one relevant to your earlier topic of memory.

   Before you answer that question, try the following exercise: First, learn this simple little rhyme: "One is bun, two is a shoe, three is a tree, four is a door, five a hive, six is sticks, seven is heaven, eight is a gate, nine is a line, ten is a hen." Ask a friend to make a list of ten nouns, and read them to you in order about one per second. If you use the imagery provided by this rhyme, you should be able to learn the list in one reading and then reproduce any one--the fourth, the seventh, when it is requested. Do it this way: When you hear the first word imagine the thing named by the word in some absurd association with the second part of the first rhyme. If the word is "car", you might imagine an absurd hot dog with a car inside a bun. Do the same for all the other words. Then when you are asked for, say, "the seventh word", use the seventh part of the rhyme and the image to recall the word.

3. Think of additional examples of each of the benefits afforded by imagery, conceptualization, and propositional thinking.

4. How might propositional thinking be investigated with animals?

5. Why is propositional thinking central to the higher forms of thought?

8. Problem Solving

READING ASSIGNMENT: 180-195. Preview "Questions and Problems", p. 51.

I. A conce ion of problem solving

Evolutionary significance

Examples

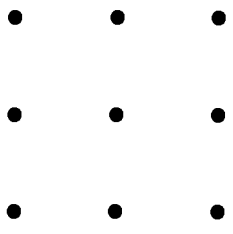
Process by which one learns or discovers some principle or set of principles that will solve a problem. Set apart from other forms of thinking by the existence of some goal and a temporary inability to reach that goal.

II. Representative experimental problems

Imagine yourself a subject:

A. Radiation problem

B. Nine-dot problem



Connect all the dots with 4 consecutive straight lines.

C. Water jar problems

A	B	C	D
21	127	3	100
14	163	25	99
18	43	10	5
9	42	6	21
20	59	4	31
23	49	3	20
15	39	3	18

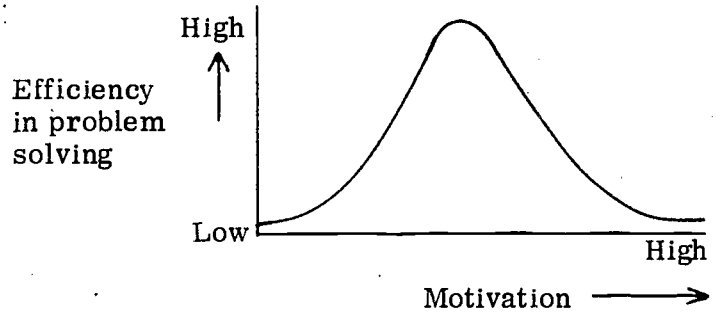
Note hypotheses formation and hypothesis testing, by rejection and confirmation, in each problem.

III. What facilitates and hinders problem solving?

Some generalizations based on many experiments presenting problems of the type illustrated:

A. Stress hinders problem solution. When stressed and non-stressed subjects are compared on the water jug problem, stressed subjects take more time to solve the first problem and show less flexibility in shifting to the simpler solution of the last two problems. On a common interpretation, stress narrows the range of hypotheses available for test.

B. Motivation is complexly related to problem solving, with moderate amounts of motivation facilitating problem solving.



A common interpretation of this curvilinear relationship: too much motivation acts as a stress to narrow the range of hypotheses and too little motivation reduces the energy and concentration required for forming a variety of hypotheses and testing them with speed and accuracy.

C. Habituation is complexly related to problem solving. It may provide a solution of similar problems but inhibit discovery of simpler solutions.

D. The nature of a problem may limit the range of hypotheses available for testing.

IV. Processes of problem solving

Much of our current conception of the processes of problem solving comes from computer simulation. Basic ideas:

A. Represent a computer program as a theory of problem solving, using common sense and intuition to construct a program that simulates human problem solving.

Program: set of instructions to the computer to carry out a sequence of operations on information fed into the computer and information stored in the computer's memory.

Computer programs are hierarchically organized into larger routines and sub-routines, the sub-routines being component operations of the larger routine operations. Selection of sub-routines may be dependent upon the outcomes of other operations.

B. A program, like a theory, may be said to predict a behavioral result, a print-out of its successive operations and states.

C. To test a theory that is a computer program, compare the print-out of the computer with the running verbal description human subjects give of their operations and states--their "print-out"--while solving the same problem.

D. Stages of problems solution--operations and states--suggested by research in computer simulation of problem solving.

1. Scan and store the problem input in temporary memory.

2. Compare input and goal and spot a discrepancy.

3. Form hypotheses, and test and reject or test and confirm. In forming hypotheses, we are programmed to scan our long-term memory guided by our scan of the problem input.

   a. We break processing down into sub-goals reached by subroutines.

   b. We use <u>algorithms</u> and/or <u>heuristics</u>.

      An <u>algorithm</u> is a fact or rule that is certain to yield a correct hypothesis regardless of the time required. A <u>heuristic</u> is an operation for forming a hypothesis quickly with some likelihood less than certain that it is the correct or best hypothesis. A common heuristic is scanning permanent memory for solutions to analogically similar problems.

E. Principal limitation and significance of computer simulation of problem solving today

1. More adequate means of evaluating theories that are programs are needed.

2. Principal value of computer simulation thus far is in suggesting states and operations to be represented in theories of human problem solving examined by the performance of human subjects.

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. In what ways are problem solving and learning continuous?

2. What are some examples of the way stress, habituation, and motivation influence every-day problem solving?

3. Must the structure of a computer--its circuitry--be like that of the brain for a computer program to be a supportable theory of human problem solving? What is the significance of formulating a theory and describing a program at the level of states and operations?

4. How can a computer program illuminate human problem solving if "there is nothing in a computer program except what you put into it?" Do computer programs and other theories differ in this respect?

5. Is there a sense in which computers may be said to "think?"

6. How many examples of algorithms and heuristics can you think of? Try to think of as many sources and rationales for heuristics as you can.

7. How is the learning of concepts related to problem solving?

9. The Nature of Communications

A Self-study Topic

READING ASSIGNMENT: 196-220

Class sessions on September 25 and September 26 will be used to discuss this topic. Work through it before coming to class. You will then be in a better position to discuss the material you were most interested in or had particular difficulties with.

Your Section Instructor will give you additional information about the class activities for this topic and how to prepare for them.

1. Among the important factors which enable one to recognize voices are loudness, dynamic range, fundamental pitch, and rate of talking. (a) What is meant by "dynamic range" and "fundamental pitch?" Give examples. (b) How do they furnish cues to the "emotionality" of speech?	
2. How does surface structure differ from deep structure? Give specific examples (not in the book) to illustrate differences.	

3. What is associative structure? How does one go about studying the nature of "associative structure"? Give examples. (Include an explanation of the "pseudo-sentence" technique).	
4. What are some of the main characteristics of "schizophrenic" language? What clues to the fundamental nature of schizophrenia does this language show?	

NOTES

UNIT FOUR

Motivation And Emotion

Professor Don E. Dulany

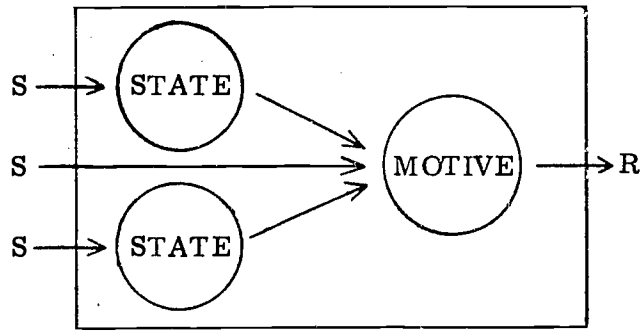
10. Biological Foundations of Motivation

READING ASSIGNMENT: 224-237. Preview "Questions and Problems", p. 59.

I. A conception of motivation

A. Examples that set the problem

B. A motive is a state of the organism represented by a construct in a theory of motivation.



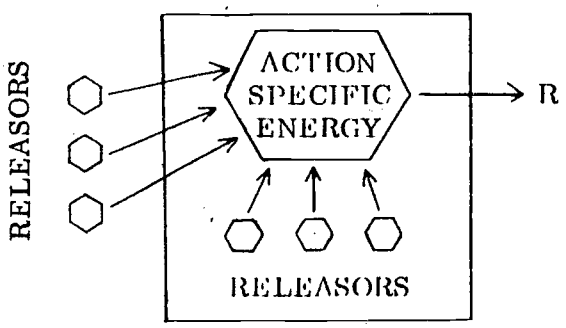
Since no one theory of motivation satisfactorily explains all behavior, various theories of motivation may be thought of as describing various kinds of motivation.

C. The study of motivation is the study of organismic states that impel and guide behavior and of the origins of those states.

II. Instinct

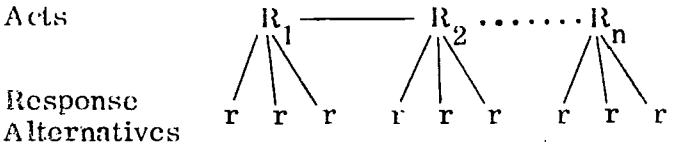
A. An example from ethology, illustrative analysis: N. Tinbergen

B. Action specific energy as a construct in instinct theory of motivation; an unlearned motivational state that controls unlearned responses.



C. Aspects of instinct theory

1. Hierarchical organization



2. Stereotypy at the level of acts, variability at the level of responses.

3. Species specific form

4. Releasors

5. Unlearned relation of behavior to a range of potential releasors; the special question of imprinting

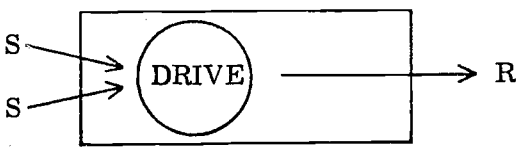
D. Hess's study

E. As we look higher in the evolutionary scale we find fewer behaviors that are instinctively controlled and more that are the product of learning and problem solving.

F. Problems for discussion: How well might instinct theory explain a number of behaviors at the human level? Sexual behavior -- courtship and mating? Post-maternal behavior? Territorality? Aggression?

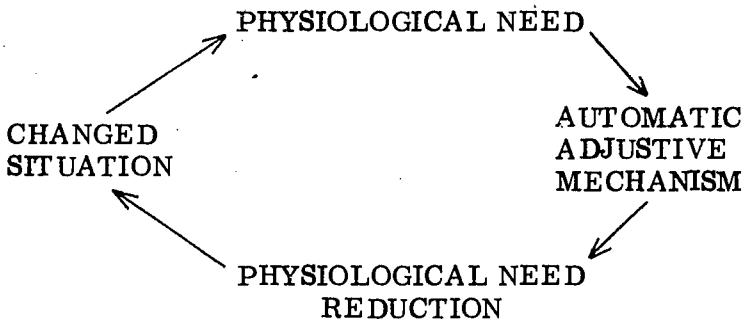
III. Drive

A. Drive state as a construct in drive theory of motivation



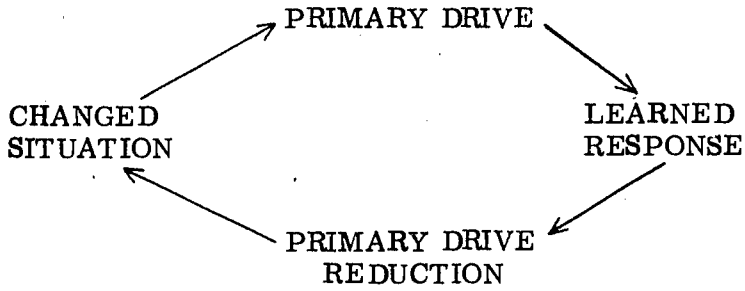
B. Primary drive; an unlearned motivational state reduced by learned responses

1. Homeostatic cycle as the model on which drive theory is formulated: W. Cannon



2. Analysis of experimental example of primary drive cycle

3. Primary drive cycle



4. Propositions of primary drive theory

5. a. Deprivation or pain produces a drive state.

   b. Drive produces variable behavior.

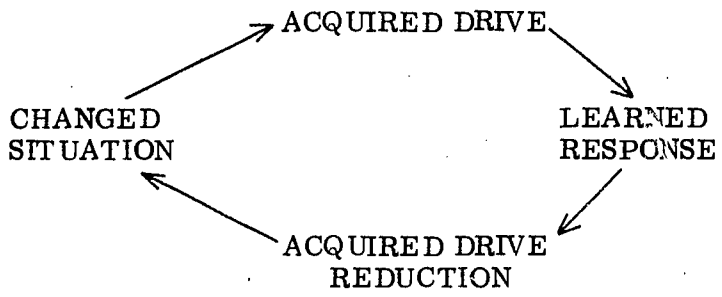
   c. Some response reduces the drive, resulting in inactivity.

   d. When the drive arises again, that response is more likely to occur and reduce the drive again -- through a process of learning.

C. Acquired drive; a learned motivational state reduced by learned responses

1. Analysis of experimental example of acquired drive cycle.

2. Acquired drive cycle.



3. Propositions of acquired drive theory

a. Pain produces fear.

b. With the association of pain and cues, those cues come to produce fear -- through a process of learning.

c. The fear drive produces variable behavior.

d. Some response reduces the fear drive, resulting in inactivity.

e. When cues arouse the fear drive again, that response is more likely to occur and re-reduce the fear drive again -- through a process of learning.

D. Critical properties of primary and acquired drives

1. Aversive

2. Satiable

E. What is the range of human behavior that can be interpreted as motivated by drives?

IV. Affects

A. Types of experiments that suggest affective motivation

1. Induced eating

2. Saccharin reward

3. Intra-cranial stimulation: lateral hypothalamus (S. Olds).

B. The basic affective scale

PAIN NEUTRALITY PLEASURE

C. If cues are associated with pleasure, we may acquire a positive motive: a wish for, or expectancy of, pleasure.

D. Agreement of affect theory and acquired drive theory on the acquisition of negative motives.

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Why do we say that a motive is an "organismic state represented by a construct in a theory of motivation?" Has anyone ever observed a motive in another person?

2. Does learning play any part in instinctively motivated behavior?

3. Why is action-specific energy called a "motivational state"? Why do we speak of "instinct theory"?

4. How does imprinting differ from the types of learning you have studied?

5. How do "drives" differ from "affective motives?"

6. In what ways does "affective motivation" differ from "homeostasis?"

7. Considering instinct, drive, and affect theories in detail, discuss how well each might explain a number of humanly significant behaviors.

11. Cognitive Sources of Motivation

READING ASSIGNMENT: 237-252*. Preview "Questions and Problems", p. 63.

I. A conception of motivation
   - A. Sensory deprivation experiments that set the problem
   - B. Dimensions of cognitive incongruity

Low		High	Difference between:
Familiar	-	Novel	Percept and memory store
Expected	-	Surprising	Percept and expectancy
Simple	-	Complex	Elements of percept

   - C. Place of cognitive incongruity in the study of motivation

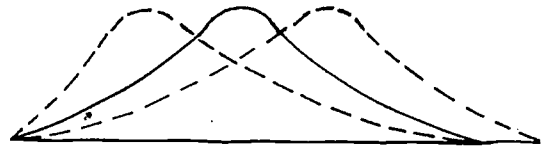
II. Experiments investigating the effects of cognitive incongruity
   - A. Familiar - novel
     1. Approach
     2. Avoidance
   - B. Expected - surprising
     1. Approach
     2. Avoidance
   - C. Simple - complex
     1. Approach
     2. Avoid
   - D. Interaction of dimensions of cognitive incongruity
   - E. The empirical puzzle

* The reading assignment deals with a wide range of facts, principles, and theories of cognitive and social motivation, whereas the videotape is concerned with a special aspect of such motivation -- incongruity and arousal. The reading assignment should therefore be studied as a broad supplement to your knowledge of motivation, rather than as an expansion of the videotape material. However, you should be able to see certain relationships between the videotape content and the reading assignment (e.g. question 7, p. 63).

III. Theories of optimal cognitive incongruity

Theories of optimal cognitive incongruity specify optimal amounts of incongruity for approach. The optimal amount of incongruity for approach is some moderate amount between maximal and minimal incongruity.

A. The basic function



Where the optimal point is within a range of moderate values depends upon the value of other incongruity dimensions.

B. The interaction of dimensions of incongruity

1. As the total from any two dimensions of incongruity decreases, the optimal amount from the third dimension of incongruity increases.

2. As the total from any two dimensions of incongruity increases, the optimal amount from the third dimension of incongruity decreases.

Principle of compensation.

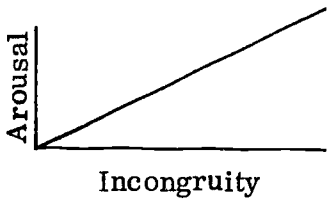
C. Role of arousal (activation)

1. Meaning: a dimension of reactivity with physiological and cognitive components

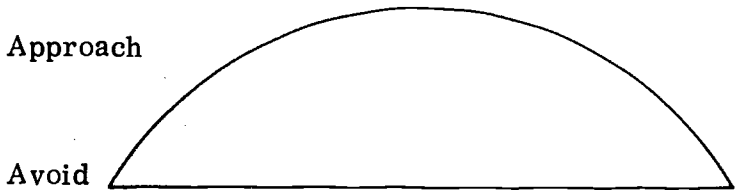
2. Physiological measures: EEG, GSR, heart and respiratory rates

3. Reported cognitive states from boredom, through relaxation, interest (alertness, attention), excitement, to panic.

4. Direct relation of incongruity to arousal



5. Curvilinear relation of arousal to behavior



Boredom Relaxation Interest Excitement Panic

6. Arousal and the hypothetical motivational state produced by incongruity

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. What is meant by a "cognitive" source of motivation?

2. What is the "empirical puzzle" that comes out of experiments investigating the relation of incongruity to approach and avoidance?

3. What does it mean to say that dimensions of cognitive incongruity "interact" in producing approach or avoidance?

4. Does the theory of optimal incongruity outlined explain the "empirical puzzle" and the interaction of dimensions of cognitive incongruity? Does that theory suggest to you still other experiments?

5. What is the relation of this theory of motivation to the common view that we work best at "what we are interested in?"

6. Think of examples of human behavior that to you seem well explained by this theory of motivation. What dimensions of incongruity are involved? What are the levels of arousal?

7. How wide do you think is the range of human behavior explained, at least in part, by this theory of motivation?

12. Emotion

A Self-study Topic

READING ASSIGNMENT: 260-288.

Class sessions on October 7, 8, 9 and 10 will be used to discuss this topic.

Work through it before coming to class. You will then be in a better position to discuss the material you were most interested in or had particular difficulties with.

Your Section Instructor will give you additional information about the class activities for this topic and how to prepare for them.

For Study and Discussion

1. Using the "inverted U-" shown in Morgan and King, describe the relationship between arousal level and performance.	
2. (a) What are the two main divisions of the autonomic nervous system? (b) What is the main function of each division? (c) How are their functions related? (d) What is their special importance for understanding emotions, especially fear and anger?	

3. (a) Explain how the lie detector operates. (b) What are the basic physiological and psychological principles it is based on? (c) What are some important criticisms of this technique for detecting "lies"? (d) Do these criticisms mean the lie detector is of little if any value? Explain.	
4. Describe briefly the main characteristics of (a) the James-Lange theory (b) Schachter's "cognitive theory", and (c) Cannon's "emergency theory". Which of these have the <u>most</u> in common? Which have the <u>least</u> in common?	
5. (a) What are the three basic dimensions that underlie <u>facial emotional expression</u>? (b) Under what conditions are judgments based on these dimensions most accurate? (c) Does research support "species-specific" mechanisms of basic emotional expression? Explain.	

GUIDE TO MIDSEMESTER EXAMINATION

The Midsemester Examination will be held on Tuesday, October 14, at 6:30 P.M. Rooms will be announced.

The examination will include Units I - IV, and will be based on:

- videotapes and reading assignments
- "Questions and Problems for Study and Discussion"
- Self-study Topics

The examination will consist of 70 multiple-choice items, designed to measure your knowledge of vocabulary and concepts; methods used by psychologists in their investigations; principles; theories; and other empirical generalizations. It will also measure your skill in interpreting or applying such knowledge. (See Appendix C for sample items classified according to these objectives.)

Suggestions for Studying

1. Use the outlines and notes printed in the Syllabus and Study Guide, plus your own notes, to practice your knowledge and your ability to interpret this knowledge.
   - Avoid sheer verbatim memorization. Practice paraphrasing information. Practice giving examples to illustrate this information (one way of "interpreting").
   - Make a list of key terms, principles, and other empirical generalizations. Paraphrase them. Supply illustrative examples.
   - Practice using terminology as guides to understanding principles and other generalizations, rather than memorizing them as ends in themselves.
2. Use this same approach to study the READING ASSIGNMENTS, the "Questions and Problems for Study and Discussion" which follow videotape presentations, and to review your answers in the Self-study Topics.
3. Familiarize yourself with the style of the items to be used in the examination, as shown in Appendix C, and with the kinds of objectives they measure.

UNIT FIVE

Intelligence

Professor Frank Costin

13. Measuring Intelligence

READING ASSIGNMENT: 432-442; 442-447; 22-23 ("correlation"). Preview "Questions and Problems", p. 76.

I. Demonstration: Wechsler Adult Intelligence Scale (WAIS)

A. Samples from tests in the "Verbal Scale"

Note what each test is designed to measure and the kinds of tasks used.

Information
- General, not specialized or technical
- Items presented in order of difficulty, as in most of succeeding tests

Comprehension
- Practical information--"common sense"

Arithmetic
- Practical calculations--included in most intelligence scales

Similarities
- Test "logical" nature of thinking.
- Differentiate between "superficial" and "superior" comparisons

Digit Span
- Short-term memory--widely used in intelligence scales
- Correlates less with overall verbal ability than other verbal tasks in Wechsler
- Helpful in diagnosing organic defects in memory--score also influenced by anxiety, etc.

Vocabulary
- Size of vocabulary a good index to general verbal intelligence. As in previous tests, items are presented in order of difficulty.

B. Samples from tests in the "Performance Scale" (non-verbal).

Note what each test is designed to measure and the kinds of tasks used.

Digit Symbol

One of oldest kinds of tests

"Neurotics" tend to do poorly. Why?

Good measure of mental efficiency.

Picture Completion

Differentiates "essentials from "non-essentials"--important aspect of general intelligence

Block Design

Good test of how person approaches problems - can help detect mental deterioration and brain damage

II. Meaning of IQ derived from Wechsler Adult Intelligence Scale (WAIS)

A. IQ is a "standard score" - is, therefore, a "deviation IQ"

Average sum of scores on a scale (Verbal, Performance, or Total) is equal to an IQ of 100 for each age group, and a standard deviation of 15 IQ points for each age group.

(See pages 21-23 in Morgan and King for explanation of a "standard deviation" and its relationship to the "normal vurve")

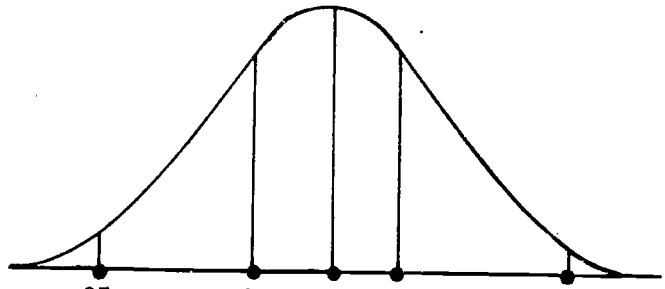
Classification of IQ's for the WAIS based on total scale: verbal plus performance

IQ	Classification	Percent included
130 and above	Very superior	2.2
120-129	Superior	6.7
110-119	Bright normal	16.1
90-109	Average	50.0
80-89	Dull normal	16.1
70-79	Borderline	6.7
69 and below	Mental defective	2.2

B. Critique of classification

C. Importance of "relative position"

D. Illustrative curve: IQ and percentile rank (based on WAIS)



IQ	65	90	100	110	135
Percentile	1	25	50	75	99

E. Further explanations (more detailed than in videotape).

An IQ of a given magnitude always has the same meaning with regard to the person's standing relative to others of the same age. Example: An IQ of 110 is at the 75th percentile at age 16, age 35, or age 60.

An IQ of 90 is exactly two-thirds of a standard deviation below the average (100) of that age group, regardless of the age at which the 90 was scored.

(The above statement should be clear if you recall that one standard deviation on the WAIS = 15 IQ points.)

F. Importance of using a representative sample from the population in "standardizing" an intelligence scale

III. A definition of "intelligence"

Wechsler: "Intelligence is the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment".

"Capacity" or "ability"?

Capacity = _____

Ability = _____

IV. Measuring intelligence in children

Demonstration: sample tasks from the Stanford-Binet Intelligence Scale

(Note the kinds of tasks required)

How did arrangement of tasks in Stanford-Binet differ from that in the WAIS?

Deviation IQ: A "standard score"

Distribution of IQ's

V. Advantages of individual tests

What the psychologist can observe

Illustration

Examiner's report: beyond an IQ

VI. Group tests of intelligence

Demonstration

Emphasis on quantitative interpretation

Purposes and advantages of group tests

Economy

Predicting success: college and occupations

Illustrative test items

Explaining results to student

Illustration from counseling session (re-created, based on typical interviews.)

VII. General intelligence and specific intelligence

A. Meaning as revealed by correlations among some of the tests in the WAIS

	Comprehension	Arith.	Simil.	Digit Span
Arithmetic	.59			
Similarities	.65	.62		
Digit Span	.48	.52	.55	
Vocabulary	.71	.64	.78	.60

Why are correlations as high as they are?

Why are some correlations lower than others?

B. Factor analysis

1. Some goals:

Nature of abilities involved in tasks which are highly correlated.

Nature of abilities involved in tasks which show low correlations.

2. Job of factor analysis: discover separate (specific) intellectual abilities

how related?

how different?

ADDENDUM I

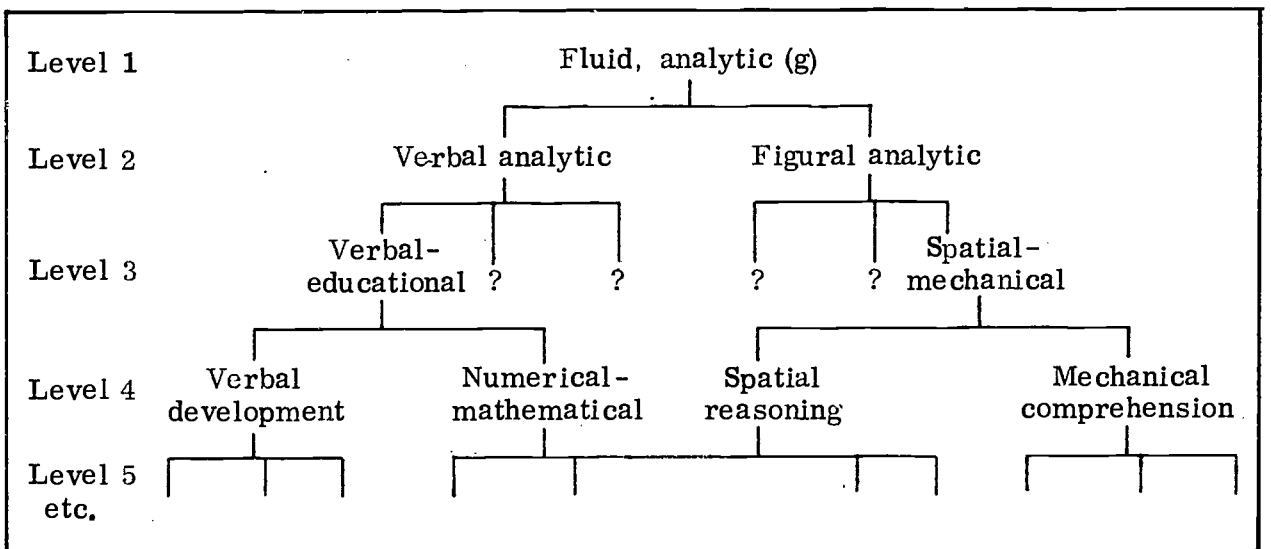
A Note on Factors of Intelligence

The factor analysis of intellectual abilities is a thriving enterprise among certain psychologists today. Various investigators have made many kinds of discoveries concerning what constitutes the "factors" of intelligence, although they don't always agree on specific methods of analysis, or the names to give to the factors they discover. The purpose of this Addendum is to summarize briefly a variety of viewpoints, integrated into one consistent position: factors of intelligence can be arranged in a hierarchy, starting with broad abilities, each accounting for intellectual behavior in a wide range of tasks, and which then can be broken down into more specific abilities.

We begin with "general intelligence", or g, as represented by Level 1 in the diagram below. One can think of g as a fluid, or analytic kind of ability - an ability which runs through almost all intellectual tasks to some extent. It is primarily a very broad reasoning ability.

Just below general intelligence (g), as shown in the diagram at Level 2, are two different kinds of broad reasoning: verbal analytic and figural analytic.

- Verbal analytic is a very broad factor involving reasoning with words, or symbols for word concepts (e.g. numbers).
- Figural analytic, also a broad factor, involves reasoning without words. Here the emphasis is on one's ability to deal with reality by means of graphic representations, figures, diagrams, etc.



At any given level, abilities have their highest correlation with those at a level immediately above or below them. [Adapted from Cronbach, L. J. Essentials of psychological testing (Third edition). New York: Harper and Row, 1970, p. 332].

- These two abilities are correlated, because they share in common a correlation with g (fluid, analytic, general intelligence). However, they also represent different kinds of abilities. For example, some people do well on tasks requiring verbal analysis, but do more poorly on tasks involving figural analysis. In other people it might be just the opposite. And, of course, there are some individuals who can do well on both kinds of tasks.

Level 3 of the hierarchy includes two fairly broad factors. The left side indicates a verbal-educational complex (a breakdown of verbal analytic) and represents the kinds of abilities involved in typical school work. At the other end of Level 3 is a breakdown of figural analytic. This ability, labeled spatial-mechanical, represents comprehension involving practical, non-verbal tasks.

- Notice the blank spaces for other possible abilities resulting from a breakdown of Level 2. For example, there is probably a verbal skill in "social communication." A person might do poorly in this, but do well in school-like tasks represented by verbal-educational.

Level 4 represents a breakdown of Level 3 into more specific factors. For example, verbal development is a more specific aspect of the verbal-educational complex in Level 3. Verbal development is involved in such task as comprehending the meaning of a paragraph.

Level 5 shows a further breakdown of abilities. These are not labeled in the diagram; the vertical lines are intended simply to suggest the complex job which psychologists engaged in the factor analysis of intelligence must carry out as they try to break down broad factors into successively narrower types of abilities, as for example in "fluency of association" (from verbal development), and "visualizing rotation in a plane" (from spatial reasoning).

In the view of some psychologists (e.g. L. J. Cronbach), the kinds of abilities which would emerge below Level 5 are probably so narrow and numerous that measuring them would not be of much practical use in guiding people's educational development and choices, or in making practical decisions about people in which intellectual tasks play an important part. Of course, these highly specific abilities remain important as part of a continual scientific exploration of the nature of intelligence.

ADDENDUM II

Developmental Characteristics of the Mentally Retarded*

Degree of Mental Retardation	Preschool (Age 0-5) Maturation and Development	School (Age 6-20) Training and Education	Adult (21 and over) Social and Vocational Adequacy
Mild (IQ 52-69)	Can develop social and communication skills; minimal retardation in sensorimotor areas; often not distinguished from normal until later age.	Can learn academic skills up to approximately 6th grade level by late teens; can be guided toward social conformity. Needs special education, particularly at secondary school age level.	With proper education and training can usually achieve social and vocational skills adequate to minimum self-support; may need guidance under unusual social or economic stress.
Moderate (IQ 36-51)	Can talk or learn to communicate; poor social awareness; fair motor development; may profit from training in self-help; can be managed with moderate supervision.	Can profit from training in social and occupational skills; can learn functional academic skills to approximately 4th grade level if given special education; may learn to travel alone in familiar places.	May achieve self-maintenance in unskilled or semiskilled work under sheltered conditions; needs supervision and guidance when under mild social or economic stress.
Severe (IQ 20-35)	Poor motor development; speech minimal; generally unable to profit from training in self-help; little or no communication skills.	Can talk or learn to communicate; can be trained in elemental health habits; profits from systematic habit training; cannot learn functional academic skills.	May contribute partially to self-maintenance under complete supervision; can develop self-protection skills to a minimal useful level in controlled movement.
Profound (IQ below 20)	Gross retardation; minimal capacity for functioning in sensorimotor areas; needs nursing care.	Some motor development present; cannot profit from training in self-help; needs total care.	Some motor and speech development; incapable of self-maintenance; most have complete care and supervision.

* Adapted from Mental Retardation Activities of the U. S. Department of Health, Education and Welfare, 1963, p. 2. and Health, Education and Welfare Indicators, U. S. Department of Health, Education and Welfare, June, 1962, p. vi.

NOTE: The American Association on Mental Deficiency defines mental retardation as "sub-average general intellectual functioning which originates in the developmental period and is associated with impairment in adaptive behavior." The AAMD emphasizes that both the IQ score and social-adaptive behavior must be impaired to justify a diagnosis of "mental retardation." IQ ranges are for the Revised Stanford-Binet Tests of Intelligence. Equivalent values for other intelligence tests have been developed, and generally are similar to those shown in the chart.

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

Measuring Intelligence

1. What are some of the "tasks" in intelligence tests which try to differentiate verbal abilities from non-verbal (performance) abilities?

2. What advantage is there in being able to obtain, as in the WAIS, both a Verbal IQ and a Performance IQ?

3. What criticisms do you have of the labels used in the Wechsler classification of IQ's? Suggestions for other terms?

4. What are some advantages of using standard scores and percentile ranks for describing performance on intelligence tests?

5. Why do most psychologists prefer to say they measure intellectual "abilities" rather than intellectual "capacities"?

6. Why must one have information about the standardization sample of an intelligence test before one can interpret correctly a score from that test?

7. What are some of the similarities and differences between the WAIS and the Stanford-Binet?

8. What are some advantages of individual tests as compared with group tests? Disadvantages?

9. If factors of intelligence are very different from each other, what kinds of correlations with each other should they reveal? Why?

10. What are some practical advantages of thinking of "intelligence" as a "hierarchy" of abilities? Cite specific examples.

Extremes of Intelligence: The Subnormal and the Gifted

1. Compare the terms "idiot", "imbecile", and "moron" for classifying levels of subnormal intelligence with (a) those in the chart on page 75 and (b) with the "modern approach" presented in Morgan and King. What advantages can you see in the latter two approaches (a and b)?

2. Why is subnormal IQ not sufficient for a diagnosis of "mental retardation?" (See chart).

3. What are some causes of mental retardation? Give examples.

4. What are some ways in which individuals with subnormal intelligence can be helped in their adjustment to school and the wider community?

5. Is there a difference between being a "genius", and scoring an IQ above 130 on the Wechsler Adult Intelligence Test (or above 140 on the Stanford-Binet)? Explain.

6. "Nature compensates by giving extremely bright children more than their share of social handicaps." True or false? Cite evidence to support your answer.

7. In a recent article, Professor Ross A. Evans (Teachers College, Columbia University) criticizes the use of certain intelligence tests for classifying black children as "mentally retarded", since these tests were standardized on white children. Here is an excerpt from his article. Do you agree or disagree with his argument? Why?

> The selective application of the inferiority assumption has been so thoroughly and subtly incorporated into the academic style of American psychology that it hardly appears to exist at all. For example, take the question of intelligence-testing. The two most commonly used individual intelligence scales for children were initially constructed, pretested, and standardized with a native-born white reference population. Non-white and foreign-born children were excluded from the item selection and standardization samples on the assumption that their inclusion would make the

standardization norms unduly low and nonpredictive for children from the majority culture. But it is with revealing irony that one further observes that these very tests are currently being used to consign minority children to classes for the mentally retarded or to the lowest educational tracks in the public schools. Moreover, data from these instruments provide sanction for the increasingly numerous statements (issued so casually by many professionals, including psychologists) that inform the lay public that 50 percent of the school children in this or that Black community are mentally retarded. But what is even more disturbing than these assertions themselves is the professional reaction to them. For the historically conditioned professional, the response has typically been the initiation of frantic activities directed toward discovering the causes of the assumed inferiority, rather than critical reevaluation of the measuring instruments themselves.

Two examples from the history of American psychometry make the significance and overtness of inferiority assumptions perfectly clear.

During World War I, the United States Armed Forces undertook a massive psychological testing program in an effort to identify those who were intellectually unsuitable for military conscription. The results of that testing program, inadequate as it was, revealed several dramatic differences as a function of race, socio-economic status, and geographic location: whites tended to score higher than Blacks; Northern whites scored higher than Southern whites; Northern Blacks performed better than Southern Blacks; the scores of those in higher socio-economic brackets were superior to those of their lower socio-economic counterparts; and so forth. These results have been well publicized, and are not of major importance here. What is of interest is the fact that 50 percent of the white draftees failed to achieve a mental age of 13 years--an achievement level that was being proposed as a cutoff point for feeblemindedness. This finding, suggesting that half the draft-age white American males were feebleminded, understandably created tremendous controversy and disquietude. However, as recent students have pointed out, a saner view followed the alarms: ". . . both psychologists and the public at large soon realized that any definition of feeblemindedness that classifies fifty percent of the population as feebleminded must be suspect to say the least." One wonders when a saner view will set in with respect to figures on the prevalence of mental retardation among children from low-income Black communities.*

* Evans, R. W. Psychology's white face. Social Policy, 1971, 1, March/April, p. 55. Quoted with permission.

14. Interpreting and Using the Results of Intelligence Tests

READING ASSIGNMENT: 447-456; 43-47 ("The Genetics of Human Intelligence").

Class sessions on October 17, 20 and 21 will be used to discuss this topic. Work through it before coming to class. You will then be in a better position to discuss the material you were most interested in or had difficulties with.

Your Section Instructor will give you additional information about the class activities for these topics, and how to prepare for them.

Motivation

Motivation is inextricably involved in the act of taking an intelligence test. Thus, the score which one obtains from the test is never a measure of "pure" intelligence. Some aspect of motivation is always involved whenever "intelligence" is measured, even though one may not be able to point specifically to the precise nature of that motivation. "Motivation", then, is really a part of "intelligence".

What principles of motivation are most relevant to problems of interpreting and using the results of intelligence tests? (See materials in Unit IV for help in answering this question.)

Culture

Studies of Remote Communities. Some years ago, in a study of white children living in a remote Kentucky mountain area, a psychologist asked a young boy this question, as part of a general intelligence test:

"If you went to a store and bought 6 cents worth of candy, and gave the clerk ten cents, what change would you receive?"

Boy: "I never had 10 cents, and if I did I wouldn't spend it for candy--candy is what your mother makes."

Psychologist tries again: "If you had 10 cows in pasture, and 6 of them strayed away, how many would you have left to drive home"?

Boy: "We don't have 10 cows, but if we did and I lost 6, I wouldn't dare go home."

(Adapted from Pressey, S. L. Psychology and the New Education. New York: Holt, 1933, 237-238.

According to the "key" of the test, the boy failed the items. Does this indicate "inferior" intelligence? Explain.

In another investigation of mountain children (East Tennessee), a psychologist administered an intelligence test to children from ages 8 to 16. Here is what he found:

Age of children	8	9	10	11	12	13	14	15	16
Average IQ	85	87	80	78	78	77	75	71	69

Source: Wheeler, L. R. Journal of Educational Psychology, 1932, 23, 351-370.

If would appear that as children in this community became older, they gradually became "less intelligent". Does this mean that 16-year-olds were necessarily less able to cope with their environment than 8-year-olds? If not, what do the data mean? Of what value are such intelligence tests for children in this kind of environment?

Group differences: racial, ethnic, socio-economic

The results of administering intelligence tests to children and adults from various racial, ethnic, and socio-economic groups sometimes show differences in the mean scores of some groups. But what does this mean?

Some writers have claimed that such differences reveal the "innate intellectual inferiority" of one cultural group to another. However, vigorous and detailed cases have been made against arguments for "innate inferiority", particularly with respect to blacks. For example, in addition to delineating the crucial effects of schooling on intelligence test performance, Otto Klineberg pointed out some years ago other inequities in social and economic status that can make for differences in performance on intelligence tests.

Klineberg's conclusions date back to 1954, but the bulk of recent evidence is still in line with his conclusion. However, there have been some new attacks on it. For writings on both sides of this issue, see the following: (You may wish to do a special project on this issue).

- Jensen, A. R. How much can we boost IQ and scholastic achievement? Harvard Educational Review, Winter, 1969.

  (Jensen claims that measured "Black-White" differences in IQ tests are primarily genetic in origin. A very lengthy article. For reasonably accurate summaries of Jensen's view, see: Time, April 11, 1969, pgs. 54-59; Life, June 12, 1970, pgs. 58c-65.)

- Council of the Society for the Psychological Study of Social Issues. A Division of the American Psychological Association. Racial factors in intelligence--A rebuttal. Transaction, June, 1969.

- Hunt, J. McVicker. Black genes - white environment. Transaction, June, 1969.

- Jencks, C. What color is IQ? New Republic, September 6 & 13 (combined issue), 1969.

- Baughman, E. E. Black Americans. New York: Academic Press, 1971.

- Eysenck, H. J. The I. Q. argument. Freeport, N. Y.: Library Press, 1971.

- Herrnstein, R. I. "I.Q." The Atlantic, September, 1971, 43-64.

- Kamin, L. J. The science and politics of IQ. New York: Halsted Press, 1974.

- More about IQ. In "Backtalk", The Atlantic, December, 1971, 101-110.

In considering these issues, one should also keep in mind the concept of "innate" intelligence. Does an intelligence test ever measure "innate" ability? Explain.

Prediction

One of the chief values of intelligence tests is their usefulness in making predictions. But not all intelligence tests have equal power for making the same kinds of predictions and some are more appropriate than others for making certain kinds of predictions.

- When a test predicts well, we say that it has a high degree of validity. A prerequisite of validity is reliability. WHY? (See Morgan and King, pp. 434-435.

Are Intelligence Tests "Fair"?

Much has been written about the fact that our typical intelligence tests penalize children and adults from certain cultural, ethnic, or socio-economic backgrounds.

- Can intelligence tests ever be "culture-free"? Explain.

- Can they be "culture-fair"? Explain. (Morgan and King, pp. 450-452)

- How likely is it that a test designed to predict success in school can be "culture-fair"? Would your answer be the same for "college success"? Why?

- One could maintain that the chief reason intelligence tests are "unfair" for certain racial, ethnic, or socio-economic groups is that society is "unfair," i.e., many individuals from these groups have not had the opportunity to learn the kinds of knowledge and the ways of thinking which the tests demand. For example, consider the position taken by Robert L. Williams, Director of the Black Studies Program at Washington University.

It has been assumed for a number of years that Black children have no "verbal skills," or at best, have some difficulty in articulation. That allegation is absolutely not true. What is really being said is that those verbal skills unique to the Black community are not rewarded in the middle-class classroom. For example, many Black children play "The Dozens" and play it quite well. "The Dozens" refers to the game of verbal insults against another person's parents. I have known Black students who were masters at playing "The Dozens" but could not read. They could phrase their "Dozens" in iambic pentameter with no difficulty and create such an emotional stir in their listener that there was no question about their verbal superiority. The average Black child has learned long poems such as "The Signifying Monkey," "Shine," and "The Pool Shooting Monkey." There never has been any question in my mind about the ability of these students to engage in verbal battles or in dialogues with their colleagues. Nor has there ever been a question of memory; the problem has been that these bits of classical Black poetry and prose are not reinforced in the school room. The Black child has had to leave his culture and verbal skills outside the door of the classroom. There is little relation between the auditory and visual images in the classroom and those found in his community. He has to learn the "Look Dick, Look Jane, Run Dick, Run Jane" styles. Thus it is no small wonder that the motivation and academic achievement of Black Americans suffer. The classroom and the textbooks contain little or no talk about the Funky Chicken, The Four Corners, and other relevant aspects of the Black child's environment.*

What is your reaction to this argument? Take a position. Appeal to evidence to support your position. Specify situations, e.g., employment, school, etc.

* Williams, R. I. Black pride, academic relevance, and individual achievement. Counseling Psychologist, 1970, 2, 19-20. Quoted with permission.

UNIT SIX

Personality and Adjustment

Professor Frank Costin

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15. Freudian Theory of Personality

READING ASSIGNMENT: 464-471; 479-482 ("defense mechanisms"). Preview "Questions and Problems", p. 96.

I. A photographic essay: some scenes from Freud's life and times

Birthplace in Freiberg, Moravia

Family circle

Marriage to Martha Bernays and professional beginnings

Use of hypnosis: attraction to work of Dr. Charcot

Consulting room

Visit to United States: meeting with G. Stanley Hall and Jung

Flight from the Nazis with Marie Bonaparte and William Bullitt

Last days in London

II. Personality structure

A. Id

(Latin: Id = "it")

Inherited, present at birth

Instincts: ultimate sources of behavior

Basic instincts: Eros and Thanatos

1. Eros

Erotic energy = "libido"

Libido involved in all pleasurable activities

Meaning of "pleasure principle"

Eros and its libidinal energy involved in all constructive activity

Eros = life

2. Thanatos

Destructive instinct ("death")

Aggression

Biological--inherited

B. Ego

Emerges from id

Arbitrates:

Id → Ego ← External reality

Obeys "reality principle"

May seek pleasure, but "wisely"

(How different from id)

Chief functions of ego

Intelligence

Learns to handle demands of id and environment

How allow id satisfaction?

Postpone? When?

May deny id impulses

(repress into unconscious)

Major task of personality: develop "strong" ego

(Why did Freud say "strong"?)

How successful can ego be?

C. Superego

Emerges from ego

Irrational but learned; compare with irrationality of id

Incorporates moral rules (conscience)

Incorporates ideals

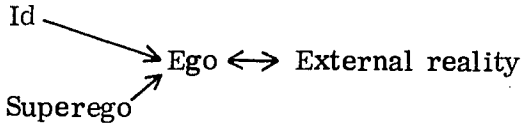
Sources of superego

parents

national traditions

teachers

etc.



Consequences of violating superego

What is a "healthy personality"?

"Strong" ego, but "reasonable" superego (Why "reasonable"?)

III. Psychosexual development

AGE PERIOD*	SEXUAL STAGE
1st 6 months	Oral-dependent
6 months to end of 2nd year	Anal-sadistic
3 - 6 years	Phallic
6 - 12 years	Latent
12 plus (Adolescence)	Genital
18 plus (Adulthood)	Genital

* Age periods are convenient approximations, not rigid time limits.

1. Oral-dependent stage

   Nutrition

   Sexual satisfaction

2. Anal-sadistic stage

   Sexual satisfaction

   Aggressive ("sadistic") impulses

   Fusion of sex and aggression

   Rudiments of independence: "holding on" and "letting go"

   "Fixation" - implications for personality development

   e.g.

   "holding on" = stinginess

   "letting go" = generosity

3. Phallic stage

a. Boy's development

Direction of libidinal energy

Legendary and dramatic origins of Oedipus complex

Sophocles: Oedipus Rex

"Oedipus complex doomed to a terrible end."

Castration complex terminates Oedipus complex

Oedipus complex → castration complex → latent stage

Boy ceases overt rivalry with father

Represses libidinal attachment to mother

Enters latent stage

Strengthens identification with father (strengthens superego)

Boy must go through above sequences to develop a

strong_____

and an adequate _____

Obstacles

90

b. Girl's development

Penis envy

Dependent affection for mother changes to identification. Why?

Electra complex: girl competes with mother for father's sexual affection

penis envy → Electra complex

Derivation of Electra complex from Greek legend and drama

(Compare girl's sequence with boy's)

Girl enters latent stage

Dangers

3. Genital stage: adolescence

Initiation into adult sex roles

Dangers: boy

Previous failure to identify with father

Overidentification with mother

Consequences for future development

What are some parallel dangers for girl and possible consequences?

4. Genital stage: adulthood

Ultimate level of psycho-sexual development

Consolidation of gains

IV. Criticisms and contributions of Freudian theory

V. EPITAPH

ADDENDUM

FREUD AND THE TRAGEDY OF OEDIPUS

"According to my already extensive experience, parents play a leading part in the infantile psychology of all persons who subsequently become psychoneurotics. Falling in love with one parent and hating the other forms part of the permanent stock of the psychic impulses which arise in early childhood, and are of such importance as the material of the subsequent neurosis. But I do not believe that psychoneurotics are to be sharply distinguished in this respect from other persons who remain normal--that is, I do not believe that they are capable of creating something absolutely new and peculiar to themselves. It is far more probable--and this is confirmed by incidental observations of normal children--that in their amorous or hostile attitude toward their parents, psychoneurotics do no more than reveal to us, by magnification, something that occurs less markedly and intensively in the minds of the majority of children. Antiquity has furnished us with legendary matter which corroborates this belief, and the profound and universal validity of the old legends is explicable only by an equally universal validity of the above-mentioned hypothesis of infantile psychology.

I am referring to the legend of King Oedipus and the Oedipus Rex of Sophocles. Oedipus, the son of Laius, king of Thebes, and Jocasta, is exposed as a suckling, because an oracle had informed the father that his son, who was still unborn, would be his murderer. He is rescued, and grows up as a king's son at a foreign court, until, being uncertain of his origin, he too consults the oracle, and is warned to avoid his native place, for he is destined to become the murderer of his father and the husband of his mother. On the road leading away from his supposed home he meets King Laius, and in a sudden quarrel strikes him dead. He comes to Thebes, where he solves the riddle of the Sphinx, who is barring the way to the city, whereupon he is elected king by the grateful Thebans, and is rewarded with the hand of Jocasta. He reigns for many years in peace and honour, and begets two sons and two daughters upon his unknown mother, until at last a plague breaks out which causes the Thebans to consult the oracle anew. Here Sophocles' tragedy begins. The messengers bring the reply that the plague will stop as soon as the murderer of Laius is driven from the country. But where is he? . . .

The action of the play consists simply in the disclosure, approached step by step and artistically delayed (and comparable to the work of a psychoanalyst) that Oedipus himself is the murderer of Laius, and that he is the son of the murdered man and Jocasta. Shocked by the abominable crime which he has unwittingly committed, Oedipus blinds himself, and departs from his native city. The prophecy of the oracle has been fulfilled.

The Oedipus Rex is a tragedy of fate; its tragic effect depends on the conflict between the all-powerful will of the gods and the vain efforts of human beings threatened with disaster; resignation to the divine will, and the perception of one's own impotence is the lesson which the deeply moved spectator is supposed to learn from the tragedy. Modern authors have, therefore, sought to achieve a similar tragic effect by expressing the same conflict in stories of their own invention. But the playgoers have looked on unmoved at the unavailing efforts of guiltless men to avert the fulfilment of curse or oracle; the modern tragedies of destiny have failed of their effect.

If the Oedipus Rex is capable of moving a modern reader or playgoer no less powerfully than it moved the contemporary Greeks, the only possible

explanation is that the effect of the Greek tragedy does not depend upon the conflict between fate and human will, but upon the peculiar nature of the material by which this conflict is revealed. There must be a voice within us which is prepared to acknowledge the compelling power of fate in the Oedipus. . . . And there actually is a motive in the story of King Oedipus which explains the verdict of this inner voice. His fate moves us only because it might have been our own, because the oracle laid upon us before our birth the very curse which rested upon him. It may be that we were all destined to direct our first sexual impulses toward our mothers, and our first impulses of hatred and violence toward our fathers; our dreams convince us that we were. King Oedipus, who slew his father Laius and wedded his mother Jocasta, is nothing more or less than a wish-fulfilment--the fulfilment of the wish of our childhood. But we, more fortunate than he, in so far as we have not become psychoneurotics, have since our childhood succeeded in withdrawing our sexual impulses from our mothers, and in forgetting our jealously of our fathers. We recoil from the person for whom this primitive wish of our childhood has been fulfilled with all the force of the repression which these wishes have undergone in our minds since childhood. As the poet brings the guilt of Oedipus to light by his investigation, he forces us to become aware of our own inner selves, in which the same impulses are still extant, even though they are suppressed. . . . Like Oedipus, we live in ignorance of the desires that offend morality, the desires that nature has forced upon us and after their unveiling we may well prefer to avert our gaze from the scenes of our childhood."

Sigmund Freud. The Interpretation of Dreams, pp. 254-256. Authorized translation by A. A. Brill. New York: Macmillan, 1933. First published in English in 1913.

A CRITIQUE OF FREUDIAN THEORY

Some Criticisms

1. Too much emphasis on the id.

Freud postulated a biological basis for sexuality and aggression to such an extent that he excluded many possibilities of learning to be aggressive and learning to behave sexually.

In the same vein, Freud has been accused of ignoring differences in culture that could produce differences in personality. For example, he assumed that the oedipus complex is universal. Modern psychologists (including some psychoanalysts) doubt if this is true, at least in the literal sense in which Freud described it.

2. Weaknesses in observational procedures.

Freud's observations were not controlled, nor did he keep verbatim notes on his patient's responses. Instead, he wrote his case descriptions hours after his psychoanalytic sessions were completed. Thus the possibility of unreliable observations, and opportunity for bias, were increased.

3. Not always explicit about how conclusions were reached.

What were the data Freud based his conclusions on? Sometimes he furnished them and sometimes he did not. Thus his observations could not always be repeated by others. Under such conditions it was virtually impossible for someone else to check his conclusions against new data, gathered under similar circumstances. Paradoxically, however, Freud made the following statement in an introductory note to his last major work Outline of Psychoanalysis (published posthumously):

> "The teachings of psychoanalysis are based on an incalculable number of observations and experiences, and no one who has not repeated those observations upon himself or upon others is in a position to arrive at an independent judgment of it."

Freud even quarreled with colleagues on the issue of checking results, especially in his earlier days of work and discovery. These quarrels were almost political in nature. In answering his critics, Freud once said:

> "Psychoanalysis is my creation. For ten years I was the only one occupied with it. Nobody knows better than I what psychoanalysis is."

4. Some concepts and theories cannot be tested empirically.

It is sometimes impossible to frame hypotheses to test some of Freud's ideas, at least in terms that Freud stated them. For example, how can one test the validity of the "death instinct"? One might conclude that when man commits suicide he is reacting to a "death instinct", or even a "self-aggressive"

instinct but, as Hall and Lindzey put it, this kind of explanation is somewhat like betting on a horse race after it is over.*

5. Derived data mostly from adults.

Freud relied mainly on retrospective studies with all the attendant dangers this method implies. Later on, psychoanalysts obtained data directly from children. In some instances they claim to have verified certain of Freud's concepts and theoretical positions; in other cases they have failed to do so. Foremost among the "orthodox" psychoanalysts who studied and helped children is Sigmund Freud's daughter, Anna, who for many years has worked in London.

6. Practically all data derived from "abnormal" individuals.

Although an understanding of abnormal behavior is helpful in understanding "normal" behavior, it is frequently dangerous to make basic generalizations about normal, everyday behavior when one's observations are based almost solely on "abnormal" persons.

Some Contributions

How can one assess Freud's contributions to a psychology of personality? One could simply add up all specific instances in which Freud was "right" about the nature of personality development, and then balance them against all those specific instances in which he has been shown to be "wrong". This is not a very fruitful approach, at least for the purposes of this course. A better way is to ask: "What are the lasting concepts, principles, and theoretical generalizations that have emerged from his work, and that are still useful in a contemporary study of personality?" Here are a few; you can probably think of others.

1. Deterministic viewpoint.

Freud helped establish a basic assumption that most psychologists rely on today: "Behavior is determined", i.e., there are reasons for what we do. (Do not confuse "determinism" with "fatalism"). Indeed, Freud also emphasized that behavior is "overdetermined", that is, the causes of behavior are complex: any given act of behavior may have a number of "causes".

2. Behavior can be unconsciously determined.

The main point here is that residues from earlier experiences may affect later behavior, without one being aware of it.

Today's psychologists may debate the nature of unconscious processes, as they seek new data, new ways of thinking about such processes, and new ways of investigating them. However, many psychologists today do accept some kind of "equivalent" of unconscious processes (e.g., unconscious motivation) although some are very careful to avoid any stigma of Freud's vocabulary! For example, the term "unawareness" may be preferred to "unconsciousness".

Freud himself had an interesting answer for those of his colleagues who first expressed skepticism about his theories of the unconscious. He retorted:

> "They may abuse my theories by day, but I am sure they dream of them at night."

* Hall, C. S. and Lindzey, G. Theories of personality. (2nd ed.) New York: Wiley, 1970, p. 71.

3. Identification.

Even psychologists who don't agree with Freud's specific formulation of the Oedipus complex (or Electra complex) still find his basic concepts of identification, and their relationship to family life, important ones in explaining personality development, especially when it comes to describing and explaining how boys and girls develop adult sex roles, a conscience, and ideals.

4. Continuity of development.

It is now commonplace for psychologists to say that new ways of behaving grow out of old ways. Not only was Freud a pioneer in emphasizing and demonstrating this, but he also pointed out--to the lasting benefit of psychology --how we try to meet, adjust to, and resolve our frustrations and conflicts-- and how these attempts affect our personality development. Freud's concepts in these areas are still influencing the kinds of problems today's psychologists investigate.

A Final Note

Although Freud neglected the fact that different cultures and classes can help create significant differences in personality and behavior, he did concern himself with broad problems of civilization and culture. For example, in the Future of An Illusion he analyzed problems of religious belief, and their relationship to man's intellectual capabilities.

Many of Freud's works are now easily available in paperback. The following is a sample you may wish to consider for future reading:

Collier Books: The Collected Papers of Sigmund Freud (1963)

History of the psychoanalytic movement
Early psychoanalytic writings
Therapy and technique
Dora - an analysis of a case of hysteria
The sexual enlightenment of children
Sexuality and the psychology of love
Character and culture
Studies in parapsychology

New York: W. W. Norton Company.

Psychopathology of everyday life (1965)
Civilization and its discontents (1962)
An outline of psychoanalysis (1949)
New introductory lectures in psychoanalysis (1965)

Beyond the pleasure principle. New York: Bantom Books, 1959.

A general introduction to psychoanalysis. New York: Pocket Books, 1952.

Moses and monotheism. New York: Random House (Vantage Books), 1967.

Future of an illusion. Garden City, New York: Doubleday, 1964.

There are also a number of good paperbacks about Freud:

Fromm, E. Sigmund Freud's mission. An analysis of his personality and influence. New York: Grove Press, 1963.

Jones, E. The life and work of Sigmund Freud. Edited and abridged in one volume by Lionel Trilling and Steven Marcus. Garden City: Doubleday (Anchor Books), 1963.

Marthe, R. The psychoanalytic revolution. Sigmund Freud's life and achievement. New York: Harcourt, Brace and World (Discus Edition), 1968.

Nelson, B. (Ed.) Freud and the 20th century. New York: World Publishing Company (Meridian Books), 1957.

Rieff, P. Freud: The mind of the moralist. Garden City, New York: Doubleday (Anchor Books), 1961.

Wells, H. K. Sigmund Freud: A Pavlovian critique. New York: International Publishers, 1960.

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. The id and the superego are both "irrational". Why? What are the differences in the basis for this irrationality?

2. Why does the ego "obey the reality principle"?

3. Why did Freud say the superego should be "reasonable" rather than, for example, "extremely powerful"?

4. Why is the phallic stage so important for determining "masculine" and "feminine" character?

5. Of what significance is the "castration complex" for determining psychosexual development in the boy?

6. Of what significance is "penis envy" for determining psychosexual development in the girl?

7. How does resolution of the Oedipus complex affect superego development?

8. Discuss the kinds of evidence which argue against the validity of Freudian theory. Be specific about the kinds of evidence you cite and the aspects of theory you are concerned with.

9. What do you think Freudian theory has contributed most to our knowledge of human behavior?

10. Kate Millett, author of Sexual Politics, has indicated that Freud was a "male chauvinist." Do you agree or disagree with this? Defend your position, especially in light of this statement by Freud:

> "It does little harm to a woman if she remains in her feminine Oedipus (Electra) attitude.... She will in that case choose her husband for his paternal characteristics and will be ready to recognize his authority.
>
> An Outline of Psychoanalysis, p. 99
> (Emphasis mine. F.C.)

11. Compare Freudian theory with the theories of Jung, Adler, Horney, and "self-theories" (Morgan and King, pp. 468-471). How do they differ? What characteristics do they have in common?

16. "The Conscience of A Child"

Preview "Questions and Problems", p. 99.

I. Introduction

This film deals with some of the same concepts presented in the videotape on Freudian theory, and in the reading assignment for that presentation. However, the approach is experimental. Dr. Robert Sears, of Stanford University, demonstrates the hypotheses he tested and the basic methods used.

II. Dr. Sears explains his research

III. Demonstrations of how hypotheses were tested

A. Dependency level of children influences the extent to which they identify with parents.

Note how this was tested:

Dependency scales

Interviews with mothers: How did their behavior affect the behavior of their children?

Interviews with fathers: How did their behavior affect the behavior of their children?

Note differences between effects of fathers and mothers on children's behavior

B. Mother is identification model for girls; father is model for boys

Note how this was tested:

Use of story completion tasks and play situations

Experiments in social situations

IV. Interpretation of findings and conclusions

Girls who show good control also show mature dependency.

Boys who show good control are those who have identified well with father.

Boys who fail to develop good self-control tend to lack identification with father.

Boys with high self-control (and strong identification with father) show readiness to confess their "transgressions." The opposite is true for boys with low self-control.

Girls with high self-control (and strong identification with mother) also show readiness to confess, but not as consistently as boys.

General conclusion: Children who identify strongly with parents (especially boy-father and girl-mother) usually act to please parents. Thus, conscience is internalized. Therefore, with proper models children will develop a strong conscience.

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. How does Dr. Sears' study and interpretation of "conscience" differ from that of Freud? How do they resemble Freud's theory? Compare them critically.

2. Do you think the methods Sears and his associates used were appropriate for testing their hypotheses? Explain.

3. Why did the behavior of boys differ from that of girls?

4. What else in addition to parent-child relations might help explain what Dr. Sears' discovered about "the conscience of a child" and how it develops?

5. What kinds of research techniques other than "experimental" were demonstrated in the film?

17. Development and Behavior during Childhood: Other Views

A Self-study Topic

READING ASSIGNMENT: 59-92; 475-478.

This Self-study Topic describes and explains development and adjustment during childhood from an eclectic viewpoint. You will find in the READING ASSIGNMENT a broad spectrum of research findings and interpretations.

Class sessions on October 29 and 30, will be used to discuss this Self-study Topic. Work through it before coming to class. You will then be in a better position to discuss the material you were most interested in or had difficulties with.

Your Section Instructor will give you additional information about the class activities for this Topic, and how to prepare for them.

1. There are two main approaches to studying personality development: longitudinal and cross-sectional. (a) Describe the basic characteristics of each approach. (b) What are the advantages and disadvantages of each approach?	
2. Morgan and King describe a U-shaped function in children's attention to new objects during the first year of life. (a) What does it show? (b) Why does it occur?	

3. (a) What does Piaget mean by pre-operational thought? Give examples of each characteristic of such thought. (b) Be sure you understand the meaning of assimilation, egocentrism, animism, and realism.	
4. Kohlberg has analyzed the development of "moral behavior" into three levels. (a) What are the main characteristics of each level. (b) Give examples for each level.	

NOTES

18. Describing Personality: Types and Traits

READING ASSIGNMENT: 471-475; 22-23 ("correlation"). Preview "Questions and Problems", p. 107.

I. Central theme: Kluckhohn and Murray's viewpoint*

II. Approaches to describing personality

A. Types

1. Typology according to Hippocrates

Humor	Temperament
Blood	Sanguine
Black bile	Melancholic
Yellow bile	Choleric
Phlegm	Phlegmatic

2. Physiognomy

Aristotle's Physiognomonica

Match faces on screen with Hippocrates' 4 temperaments

Compare your responses with temperament artist intended to depict

Interpretation and critique

* Both were distinguished scholars: Clyde Kluckhohn, anthropologist; Henry Murray, psychologist-psychiatrist.

3. Sheldon's typology

a. Dimensions of physique

endomorphy 1-----7

mesomorphy 1-----7

ectomorphy 1-----7

b. Meaning of "somatotype"

Pictorial illustrations

(Fill in blank spaces)

Rating	Predominant dimension
7 - 1 - 1	_____
_____	_____
_____	_____
_____	_____

Are all mathematical possibilities meaningful?

c. Dimensions of temperament

viscerotonia (higher the rating, 1-----7 more individual likes comfort, relaxation, sociability, etc.)

somatotonia (higher the rating, 1-----7 more individual is vigorous, active, outgoing, etc.)

cerebrotonia (higher the rating, 1-----7 more individual is inhibited in social relations, wants solitude, etc.)

d. Examples of temperament ratings

	Predominant dimension
7 - 3 - 2	_____
2 - 7 - 1	_____
1 - 3 - 7	_____

e. Correlations between physique and temperament

(1) Data: supply the r's

Physique	r	Temperament rating
Endomorphy	____	Viscerotonia
Mesomorphy	____	Somatotonia
Ectomorphy	____	Cerebrotonia

(2) Interpretation of r's

(3) Critique

Opportunity for bias

Other investigations

Example: Irvin Child's study of Harvard freshmen

Sample items representing:

Viscerotonia

Somatotonia

Cerebrotonia

Comparison of results with Sheldon's data (insert r's)

Somatotype	r (Sheldon)	r (Child)	Temperament
Endomorphy	(.79)	_____	Viscerotonia
Mesomorphy	(.82)	_____	Somatotonia
Ectomorphy	(.83)	_____	Cerebrotonia

f. Conclusions: physique and personality

Is there any relationship between physique and temperament? How can physique play a role in development of personality and behavior?

Can typologies handle such relationships adequately?

B. Traits

1. What is a "personality trait"?

Definition: "A collection of reactions or responses bound by some kind of unity which permits the responses to be gathered under one term and treated in the same fashion for most purposes." (R. B. Cattell)

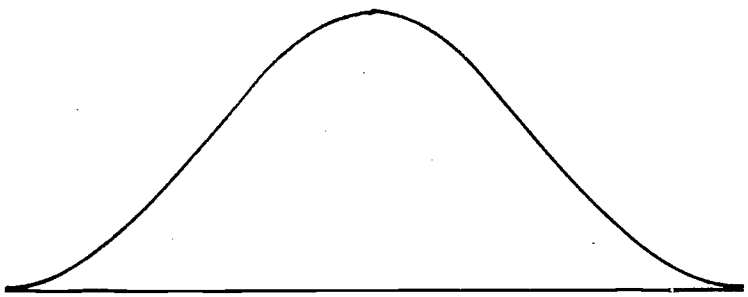
Some Categories of Traits

Physiology
Temperament
Motives
Attitudes
Interests
Values
Abilities
Modes of adjustment

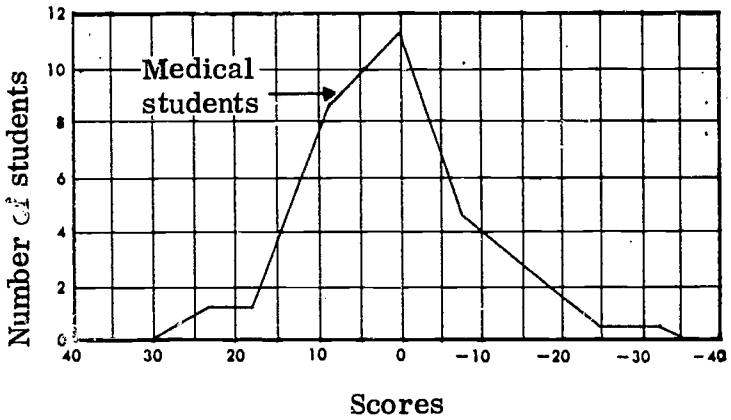
2. Illustrative model

3. Traits and the concept of a "continuous distribution"

a. An "idealized" curve: traits versus types



b. Curve based on actual data



Note relationship between this curve and the "idealized" curve

4. Patterns of traits

Interrelationship

Importance of environment

Traits not fixed entities: describe an individual's capabilities under certain environmental circumstances

Implications for predicting behavior

5. Does trait approach lose sight of the individual?

a. An argument

b. An answer: Dr. E. Lowell Kelly, University of Michigan

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Consider this definition of personality: "Personality is the dynamic organization of the individual's characteristics into an integrated and unique system, as reflected in behavior."

   Now answer these questions.

   (a) Can behavior change without "personality" changing? Explain.

   (b) Can "personality" change without behavior changing? Explain.

2. Suppose an investigator finds a significant correlation between physique and temperament. Does this mean that the physique caused the temperament? Explain.

3. Summarize in your own words the arguments for and against describing personality according to: (a) types, (b) traits.

4. It has been claimed that science deals only with "general" laws. If this is true, how can there be a "science of personality", since each individual's personality is "unique"?

19. Personality Tests

A Self-study Topic

READING ASSIGNMENT: 432-436; 456-463; 22-23 ("correlation"). Preview "Questions and Problems", p. 119.

Class sessions on November 3 and 6 will be used to discuss this topic. Work through it before coming to class. You will then be in a better position to discuss the material you were most interested in or had particular difficulties with.

Your Section Instructor will give you additional information about the class activities for this topic and how to prepare for them.

Introduction

Previous videotapes and reading assignments in this topic have not only described and interpreted some basic concepts, principles, and theories of personality, but have also shown from time to time how psychologists go about gathering this kind of information. Some of these ways involve the use of personality tests.

The purpose of this Self-study Topic is to examine some basic characteristics of personality tests, and some of the problems psychologists meet in developing and using them.

Personality tests are used not only for testing scientific hypotheses, but are also widely used to make practical decisions about people. To cite just a few examples:

- An industrial psychologist may use personality tests to help decide whether or not a person is suitable for a particular job.
- A clinical psychologist may use personality tests to diagnose and evaluate an individual's problems and conflicts, and thus be in a better position to help.

(See Morgan and King for further examples.)

The most widely used kinds of personality tests are the so-called "paper-and-pencil" devices, which require one to introspect and report on personal characteristics--to describe oneself.

- Usually these tests are so arranged that responses can be scored objectively, just as can be done with standardized achievement and intelligence tests.
- Self-report tests of personality may go under a number of different labels: questionnaires, inventories, personality schedules, self-rating scales, etc.
- Some self-report tests are unidimensional, i.e., attempt to measure only one trait dimension. For example, a test might measure only the dimension of ascendancy-submission.
- Paper-and-pencil tests of personality may also be multi-dimensional, i.e., may measure a number of trait dimensions within a single test.

Characteristics of Self-report Tests

A Typical Unidimensional Test

Here are some sample items from the Taylor Manifest Anxiety Scale. How would you answer them (True or False)?

1. ( ) I worry quite a bit over possible troubles.
2. ( ) I am usually calm and not easily upset.
3. ( ) I am happy most of the time.
4. ( ) I often find myself worrying about something.

Here are the kinds of responses which would be scored as "anxious":

1. True
2. False
3. False
4. True

There are 50 items in the test; the respondent receives one point for each item scored as "anxious".

- The test is called a "manifest anxiety" scale because it is intended to measure the anxiety which a person is aware of.
- Notice, too, that the sample items - and they are typical of all items in the test - are getting at a predisposition to anxiety. For example, witness the words "quite a bit", "usually", "most of the time", "often".
- This test, then, calls for a self-report of a general condition of anxiety - an anxiety drive.

Reliability

How can one determine the reliability of self-report tests? (See Morgan and King, p. 434 for the meaning of "reliability".) One way is to see how stable the responses to items are over various periods of time. We shall use the manifest anxiety test just described as an example.

The anxiety test was given twice to three different groups of college students.

- The first group (A) repeated the test after an interval of three weeks. The correlation (r) between the scores on these two occasions was .89.
- Group B repeated the test after an interval of five months. The correlation between scores was .82.
- Group C repeated the test after nine months. The correlation was .81.

[See Morgan and King, pp. 22-23 for an explanation of the "correlation coefficient" (r)].

These correlation coefficients indicate that the anxiety test was not measuring momentary anxiety - here today and gone tomorrow - but instead reflected a more stable kind of anxiety.

[Why do the coefficients (r's) support the above statement?]

All self-report tests - whether they measure anxiety or some other personal characteristics - must prove out their reliability. Furthermore, some self-report tests may be adequate for short-term predictions but not for long-term predictions, depending on how stable the tests are over varying periods of time.

Whether a self-report test should have long-term ability, short-term ability, or both, depends on the kinds of scientific investigations it will be used in, and the kinds of practical decisions the test is supposed to help people make.

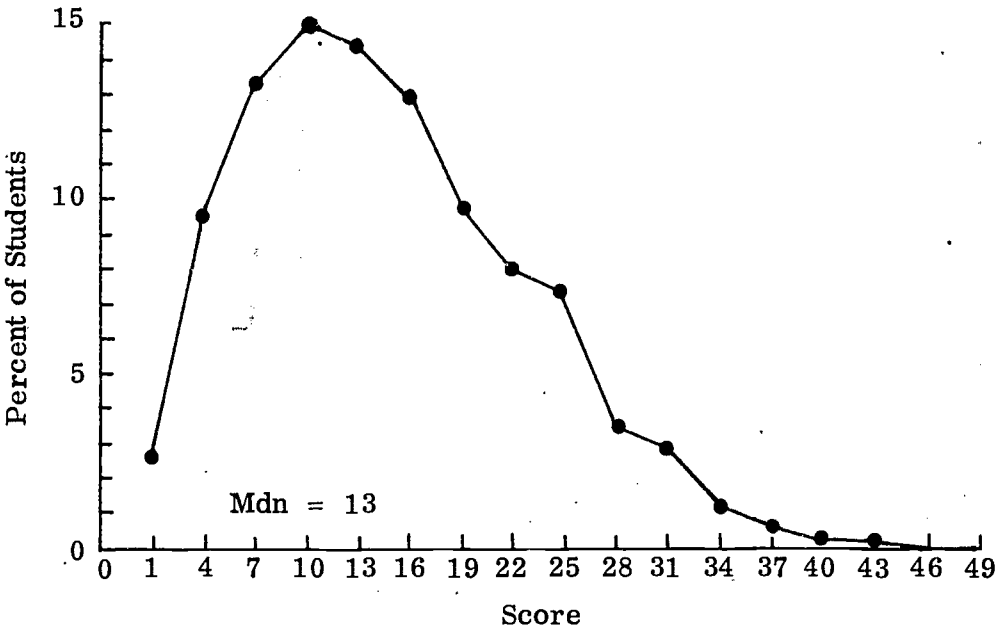
- Give examples to illustrate various conditions in which short-term stability only would be satisfactory and other conditions in which long-term stability would be necessary.

Validity

A test can be highly reliable, but not have a high degree of validity. WHY? (See Morgan and King, p. 434).

To illustrate one way in which validity can be determined, consider the following method used in developing the manifest anxiety scale discussed earlier.

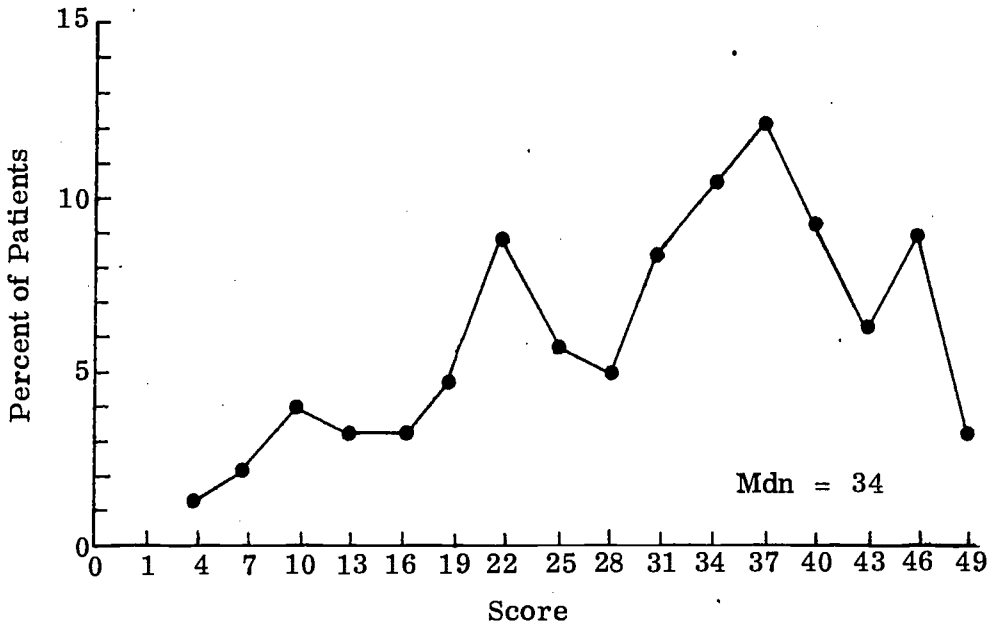
- The test was given to about 2000 University students, drawn from many different kinds of classes. The investigator was satisfied that these students were typical of those one would find in many universities, and would not be expected to show, on the average, unusually high levels of anxiety. On the next page is the distribution of their anxiety scores.



- The horizontal axis represents scores on the anxiety test. The vertical axis shows the percent of students making these scores.

- Notice the general shape of the curve. As you can see, the scores pile up at the low end of the scale, indicating relatively low levels of anxiety. The median anxiety score was 13 points out of a possible 50 (the higher the score, the greater the manifest anxiety).

- The same test was then given to over 100 psychiatric patients. (The investigator made the reasonable assumption that this group would manifest more anxiety symptoms than would "typical" colleges students). Here is the distribution of the patients' scores:



- Notice how more patients attained high anxiety scores, compared with the curve for students. You can also see how the curve for patients rises sharply at about the same point where the curve for the students declined.

- Compare the two medians: 34 for patients, whom we would expect to be highly anxious, and 13 for college students, whom we would expect to be less anxious. Since the scores reflect the relative levels of anxiety one would expect from these two samples, we can say that the test does seem to measure manifest anxiety (i.e., is valid).

(Can you suggest other ways for determining the validity of this test?)

Problems in Self-report Tests

When one considers the format of self-report tests, their ease of administration, and the objective scoring procedures, it is easy to see why they are so popular with psychologists who rely on the use of personality tests for research and practice. Furthermore, they tend to be more reliable than many other types of personality tests. But there are serious problems in dealing with these tests. Let's consider some of them.

Acquiescence. Some people tend to choose positive responses to items, regardless of their content. This tendency in itself reflects an interesting personality characteristic:

- If a self-report test were so constructed that everytime certain individuals agreed with an item they scored a point toward a particular personality trait, and if they agreed with many of the items, then the test could be measuring acquiescence rather than the particular trait the test was designed to measure.

- Or in any case, under such conditions we wouldn't really know how much of the score was due to acquiescence, and how much was due to responding to the content, independently of acquiescence.

How can the problem of acquiescence be handled? One way is to word the items in the test so that "true" (or "agree", or "yes", etc.) is not consistently the response that contributes to a person's score, for whatever personality trait the test is supposed to measure.

- Consider the items shown previously for the manifest anxiety scale (page 117). How do they reflect the attempt to control for "acquiescence"?

Social Desirability. Another problem in developing, administering, and interpreting the results of self-report personality tests is that people naturally like to think they have socially desirable personality traits.

- Consciously, or unconsciously, they may tend to deny their undesirable characteristics, especially those which they think society - or a particular social group - considers undesirable.

- Therefore, some individuals might respond "false" to an item like this: "There are times when I feel like hurting other people." And they might do so even though they really do feel like hurting people - at least some of the time.

Whether or not social desirability is a problem in personality testing depends to a great extent on who is taking the test, why the person is taking the test, and the conditions under which that person is taking it. For example:

- Psychologists now know that anonymous replies on a self-report test tend to be less subject to social desirability than responses on a test where the persons must give their names, or supply other information which they think will identify them.

- Or suppose people come to a psychological clinic for help. They are probably going to be less affected by social desirability in responding to test items than if they were applicants for a job, and therefore were concerned about how their responses would affect whether or not they obtained the job.

(Can you think of other examples?)

Handling Social Desirability. How do psychologists handle problems of social desirability in constructing self-report tests of personality?

- One approach is simply to build in a method of detecting it, and thus be in a better position to interpret the test results. A common technique is to include items in a test which describe socially undesirable behavior--as many people would view it--but behavior which one could not honestly deny. For example, how would you respond to items like these (Yes or No)?

"Sometimes I lose my temper."

"I like to gossip at times."

"I'm always willing to admit it when I make a mistake."

"I always practice what I preach."

- If you were perfectly honest with yourself you would probably have answered "Yes" to the first two items and "No" to the third and fourth.

- Now suppose that on a test which had items like these built into it, as a "detector", a person consistently answered practically all of them in a socially desirable direction, rather than in the "honest" direction. One would then suspect the validity of the scores for the items representing the particular personality traits the test was intended to measure.

The kind of "detection" described above is "after the fact." How can social desirability be controlled while a person is taking the test? One method is the forced-choice approach. To illustrate this technique we shall consider a multi-dimensional test: the Gordon Personal Profile. This test measures four dimensions of personality traits:

- Ascendancy: the higher the score, the more the respondent claims to be self-assured, assertive, and independent.

- Responsibility: the higher the score, the more the person perceives himself as self-reliant, determined, and dependable.

- Emotional stability: the higher the score, the more the individual reports to be free from nervousness.

- Sociability: the higher the score, the more the person describes himself as liking to work with others, wanting to mingle socially, and in general wanting to be gregarious.

Here is the format of the items. Notice how the design differs from the ways items were displayed in the anxiety test.

	M	L
a person who can be relied upon	⋮	⋮
easily upset when things go wrong	⋮	⋮
not too sure of own opinions	⋮	⋮
prefers to be around other people	⋮	⋮

The person taking the test is asked to mark the one phrase which is MOST (M) like him, and the one phrase that is LEAST (L) like him. There are 18 sets of phrases in the entire test, all arranged like the one shown above.

Each descriptive phrase in a set is relevant to one of the four personality dimensions being measured. How does such an arrangement help control social desirability?

- Two of the four phrases in a set are worded so as to be equally high in social desirability. In the example given above the phrases are the first ("a person who....") and the fourth ("prefers to be....").

- The other two phrases in a set are worded so as to be equally low in social desirability. In the example given above these phrases are the second ("easily upset....") and third ("not too sure,...").

- The matching of phrases is based on opinions of a large number of judges during the development of the test.

- Since respondents are asked to mark one phrase in each group as being MOST like them, and one phrase as being LEAST like them, they can't respond to every phrase in a set in the most socially desirable manner, as they could in a test like the anxiety scale described earlier. Even if they always chose a desirable phrase as being most like them, they would have to ignore another equally desirable phrase--or choose it as being least like them.

This method in many instances reduces the possibility of social desirability affecting the final score on a personality test. The technique itself may vary somewhat; for example, sometimes a person may be asked to make a choice between only two items in a set.

Projective Tests

We have seen that one of the problems in using and interpreting self-report tests is the matter of "honest" responses: Are people really describing themselves, or just indicating what they think is the "nice" thing to say--the "socially desirable" thing? And we have seen one way in which this problem can be handled.

But there is another related problem: Can people always describe themselves objectively and "honestly"? Perhaps they don't have that much insight, or they may be inhibited. Therefore some psychologists have argued that we also need personality tests that do not depend on direct self-report. We also need - they say - tests which get at personality traits more indirectly, more subtly, so that even if individuals are not consciously aware of certain personality characteristics they can still reveal them, provided the psychologist

is skilled enough to interpret them. It is this kind of argument that helps support the development and use of projective tests.

- To a great extent projective tests owe their development to psychologists with a psychoanalytic interpretation. Essentially such tests present an individual with a rather ambiguous situation - an inkblot, for example - and the person is asked to describe it. (See Hilgard, et. al., pages 434-435 for a description of the Rorschach Inkblot Test).

- Or an individual might be asked to tell a story about a picture that is ambiguous enough so that all kinds of stories could be told.

To illustrate how projective tests can be used to assess personality traits we shall concentrate on the approach which requires a person to tell a story about a series of pictures: The Thematic Apperception Test (TAT). As traditionally used in a clinical assessment of personality the TAT consists of 20 pictures, and requires about two hours to administer: two sessions of ten pictures each. However, when clinical psychologists today use the TAT, they may frequently select only certain pictures - perhaps 5 or 10 - depending on the specific purpose for which they are using the test.

Furthermore, many variations of the TAT have been developed since its original development by Dr. Henry Murray and his associates at Harvard University. For example, some are designed for children, in which animals are used. Others present only teacher-student situations, or parent-child situations. Others have been designed for various ethnic, racial, or cultural groups.

Here is a typical way in which the psychologists begins the administration of the TAT.

> This is a test of imagination. I am going to show you some pictures, and I would like to have you tell me some stories about them, anything that comes to your mind. Let each story have a beginning, a middle, and an end. In other words, let your story have a plot. In order to get everything you say just the way you say it, I am going to use this tape recorder. We'll begin with this picture.

(See picture on following page.)

Here is a picture similar to one used in the original TAT. On the next page is a story a 20-year old female college student told about the picture. Before reading it you might like to write your own story, and then compare it with hers.

Well, this takes place on a beach - at a girl's college reunion. It's a summer party. The girl behind the tree is a sinister character. She is in the same sorority, but hates the other girl because she is so popular. The girl behind the tree isn't popular at all, so she's plotting to kill the girl on the beach, the girl who is running. (Long pause). (Examiner: How does it end?) The girl doesn't succeed in her plot.

There are a wide range of variables a psychologist might look for in analyzing this story.

- Personal relationships. With whom does the storyteller seem to be identifying? What are the roles ascribed to the main characters? How do they relate to each other?

- Motives. What motives does the story reflect? How are these motives related to the identification figures? What are the motives of the character the storyteller does not identify with?

- Theme of story. What basic theme is being revealed: e.g., Conflict? Aggression? Other themes?

- Perception of environment. How does the storyteller perceive the world: e.g. as threatening? Benign? etc.

Such variables are by no means exhaustive; many other kinds might also be considered. (Can you think of any?) Furthermore, no one story is sufficient for an assessment of personality. In analyzing stories psychologists look for trends, and relationships between one story and another, e.g., is conflict being expressed consistently throughout the stories?

(See Morgan and King, page 431, for another TAT picture, and the interpretation of a story.)

Although the goal of making a global assessment of personality by using the TAT is an ambitious and appealing one, the validity of an approach this broad is highly questionable, judging from the results of studies that psychologists have made over the years. Personality characteristics involve too many complex interrelationships for a single instrument to measure them successfully and comprehensively. Therefore, in recent years the trend in using the Thematic Apperception Test (and other projective tests as well) has been in a more limited direction. Psychologists who use such tests are now more likely to look for a more limited number of variables which will reflect a more limited number of traits. For example, they may:

- Look only for aggression in TAT stories, by counting aggressive words.

- Look for achievement motives by counting words or statements related to achievement.

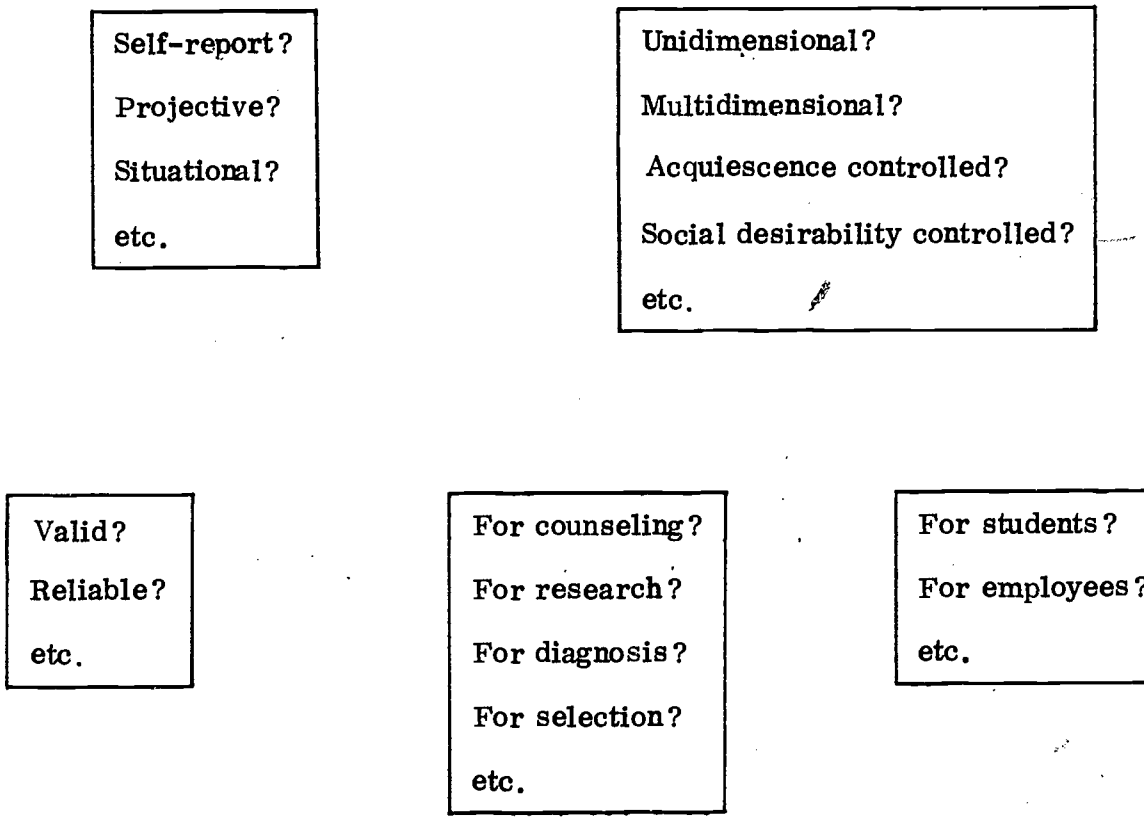
These examples are only suggestive, and a useful approach need not be as restrictive. In general, however, the trend among psychologists today in using projective tests especially for research, is to:

- limit the scope of their analyses and interpretations.

- quantify the content of the stories, trying to be as objective as possible.

Conclusions

This Unit has presented only a few ways of measuring personality with tests. Psychologists who wish to use personality tests - whether for research or for practical decisions - are faced with a multitude of instruments from which to choose. Therefore, in deciding which tests to use, and how to use them, they must ask many kinds of questions:



QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Summarize the advantages and disadvantages of self-report personality tests. Do the advantages outweigh the disadvantages? Defend your position.

2. Which do you think is the most serious problem in self-report tests, "acquiescence" or "social desirability"? Why?

3. Psychologists, government officials, and educators, have become increasingly concerned in recent years with the possibility that personality tests can become an "invasion of privacy".

   (a) Under what conditions do you think this might be true?

   (b) What safeguards can be used to facilitate the proper use of personality tests?

4. What do you see as the advantages and disadvantages of projective tests? Do you think their advantages outweigh their disadvantages? Why?

5. Compare the newer trends in using projective tests with the older, "global assessment" approach.

20. Adjusting to Conflict

READING ASSIGNMENT: 252-258. Preview "Questions and Problems", p. 123.

I. Meaning of "conflict"

Illustrations

Conflict = "incompatible response tendencies toward a goal"

Need → drive → response → goal (reinforcement)

II. Typical conflict situations

A. Approach-approach

1. Description: diagram

O = organism

+ = valence of goal

arrows = direction of response tendencies

Why "unstable equilibrium"?

2. Laboratory demonstration

3. Everyday life: illustration

4. Resolution: illustrative examples

Franklin method

Rationalization of residual conflict (reducing cognitive dissonance)

Time

B. Avoidance-avoidance

1. Description: diagram

Valences of goals (-)

What is direction of response tendencies? (arrows)

Why "stable equilibrium"?

2. Laboratory demonstration

3. Outside the laboratory: illustration

4. Resolutions: illustrative examples

Realistic

Time

Leaving the field

Restructuring the field

C. Approach-avoidance

1. Description: diagram

Valences of goal (+ and -)

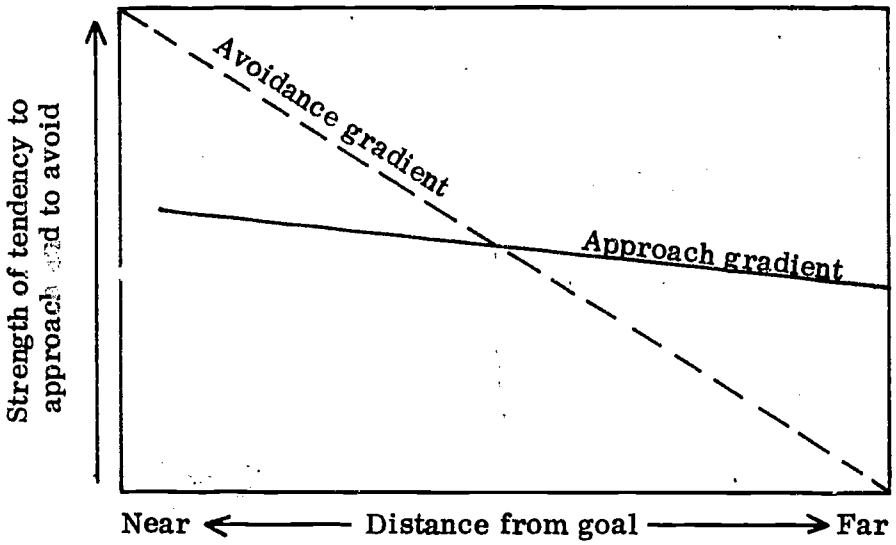
What is direction of response tendencies? (arrows)

Illustration

2. Laboratory demonstration

Why a "stable" situation?

3. Gradients of approach-avoidance



4. Resolution: illustrations

Realistic

Restructure perception

Leave field

D. Double approach-avoidance

1. Description: diagram

2. Laboratory demonstration

3. How resolve?

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Why are approach-approach conflicts relatively easy to resolve?
2. Why are avoidance-avoidance conflicts usually so difficult to resolve?
3. Why is the avoidance gradient in a conflict situation steeper than the approach gradient?
4. Give an example from your own experiences of each type of conflict situation, and how it was resolved.

21. Adjusting to Frustration

READING ASSIGNMENT: Review 249-252; 252-253. Preview "Questions and Problems", p. 127.

I. Meaning of "frustration"

A. Definition

"An interference with a goal direct-directed response"

B. Explanation

Need → drive → response → goal (reinforcement)

Illustrative examples

Barrier to goal

Conflict between goals

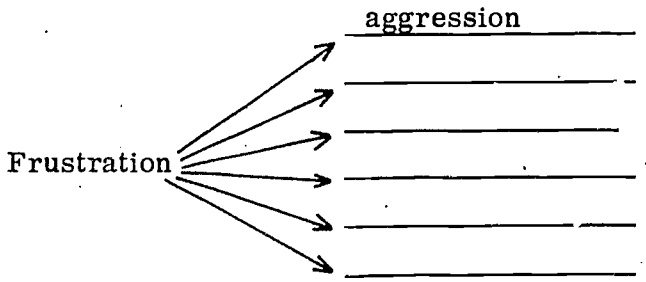
II. Sources of frustration: illustrations

1. Physical environment

2. Social environment

3. Personal characteristics

III. Responses to frustration: overview



Importance of individual differences

IV. Aggression as a response to frustration

A. Definition of "aggression"

"A response intended to produce pain, injury or damage"

Clarification

Importance of "intended"

Not restricted to physical attack

B. Aggression as a direct response. some observations of a social-psychological experiment (re-created, based on experimenters' description)

Deprivation of sleep

Frustrating incidents introduced by experimenters

Illustrations of students' reactions to frustration

C. Displaced aggression

1. Meaning of "displacement"

2. Illustration

D. Effects of "models" on responses to frustration

1. Illustrative experiment: filmed observations by Albert Bandura

Modeling

3 groups of children in nursery school matched on aggressive play

Group A: observed adult play "aggressively". (Note behavior)

Group B: saw film of above behavior

Group C: control - did not watch model

After modeling

A, B and C allowed to play with toys, then stopped (frustrated).

Then given choice of playing with variety of other toys (some especially appropriate for "aggressive" play). Note behavior.

2. Results

Insert data in chart below

Compare A, B, and C

Group	Model	Aggressive behavior
A	Live	
B	Film	
C	None	

3. What are implications of findings?

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Defend this statement: "Frustration is a necessary correlate of healthy personality development."

2. (a) Consider each of the possible reactions to frustration mentioned in the videotape. What factors might help determine which of these responses an individual would make? Give examples to illustrate your answers.

   (b) What are some other possible reactions to frustration? Give examples from your own experiences and observations.

3. (a) What implications for child-rearing practices does Bandura's experiment have?

   (b) Do the findings support a practice of reducing violent TV programs for children? Explain.

4. (a) What implications does the frustration-aggression hypothesis have for present-day "dissent movement (e.g., campus protest movements, Black activism, Women's Lib movements, etc.).

   (b) Is the hypothesis adequate to explain such behavior? Are supplementary hypotheses and principles necessary? Explain.

5. In an article entitled "Does Television Violence Cause Aggression?" (American Psychologist, April, 1972, pp. 253-263), Leonard D. Eron and colleagues reported that:

> ...television habits established by age 8-9 years influence boys' aggressive behavior at that time and at least through late adolescence. The more violent are the programs preferred by boys in the third grade, the more aggressive is their behavior both at that time and 10 years later. This relation between early television habits and later aggression prevails both for peer-rated aggression and for self-ratings of aggression. ...these early television habits seem to be more influential than current viewing patterns since a preference of for violent television in the thirteenth grade is not at all related to concurrent aggressive behavior, nor are early television habits related to later television habits. (p. 260)

   (a) Can you see any relationship between these findings and those of Bandura? Do they have similar implications? Explain.

   (b) Eron et. al. did not find any correlation between girls' early television habits and later aggression. What are some plausible reasons for this result, as compared with the positive correlation for boys?

UNIT SEVEN

Behavior Disorders

Professor Frank Costin

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22. Neurotic Behavior

READING ASSIGNMENT: 485-499; 499-500. Preview "Questions and Problems", p. 131.

I. Some symptoms of neurotic behavior: introductory view of patient in therapy

(Therapy scenes are re-created, based on actual case material).

II. Maladaptive characteristics of neurotic behavior

Inadequacy of responses to environmental demands

Failure to handle problems of living appropriately

Failure to progress adequately toward goals

Interference with other people's progress toward goals

III. Complaints of personal discomfort and distress: illustrative scenes

Anxiety

Depression

Note inappropriate nature of behavior. How does this inappropriateness help one distinguish between "normal" and "neurotic" behavior?

Physical discomfort

Difficulties in interpersonal relationships

How would one differentiate these complaints from "normal" physical discomfort and "normal" difficulties in interpersonal relationships?

IV. Initial interview is diagnostic and therapeutic. WHY?

V. Areas that all psychotherapists must deal with

Cognitive behavior

Emotional expression

Perceptual and motor behavior

Physiological functions

Environmental contingencies

VI. Group therapy

Economy

Sharing problems

Practicing and testing possible solutions

Illustrative scene
(Re-created, based on actual case material)

What "areas" (V above) does the scene illustrate? Explain

How were possible solutions to problems tested?

Basic goals in therapy (See Addendum)

What goals seem to be especially related to the group therapy scene?

Other possible goals?

ADDENDUM

Some Basic Goals in Therapy

* The therapist must provide opportunities for neurotic individuals to practice making decisions--to practice learning how to be responsible for themselves. To put it another way, the therapist must help the neurotic individual develop a more adequate self-concept--to be able to say: "I am a person who can manage my own affairs."--and to help that person learn to behave in a way that is consistent with that new belief.

* The therapist must help provide opportunities for the neurotic individual to express and experience closeness to other people without the fear of being hurt. Many such persons are afraid of such closeness because past experiences have taught them it is dangerous. The therapist can be a model in helping them overcome this fear by providing situations in which they can experience closeness without being hurt. The therapist helps not only by listening, but by showing understanding--a combination that many neurotic individuals have not previously experienced to any appreciable extent.

* The therapist must help neurotic individuals get rid of those symbols they have learned that produce inappropriate anxiety, guilt, or somatic distress. The therapist must help them learn new and more appropriate responses to the symbols that were producing such neurotic behavior.

* Although everyone must behave defensively at some time or another, neurotic individuals are over-defensive. They use their defenses irrationally and inappropriately. During therapy, as their defenses become exposed, they may transfer their irrational and inappropriate behavior to the therapist. The therapist must then show them an understanding of what is going on--must explain their behavior--and help them learn more appropriate ways of using defenses. In this way the therapist can help them learn to behave more rationally and in a less self-defeating manner.

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. What is meant by "maladaptive" behavior?

2. Why is neurotic behavior "maladaptive"?

3. How do complaints of personal discomfort serve as symptoms of neurotic behavior?

4. What are some symptoms of neurotic behavior that may occur independently of "personal complaints"? (See reading assignment).

5. How can an initial therapeutic interview be both diagnostic and therapeutic?

6. Give examples of neurotic behavior that would be relevant for each of the "areas" mentioned in the videotape. (See V in outline).

7. What are some advantages of group therapy? Can you suggest any possible disadvantages?

8. In presenting various "neurotic" complaints the videotape did not emphasize the usual standard psychiatric classifications of neurosis as described in your reading assignment. How did the various symptoms shown in the videotape relate to the standard classifications? Can you see any advantages of those classifications? Disadvantages?

9. What are some of the "symbols" neurotic individuals may have learned that "produce inappropriate anxiety, guilt, or somatic distress?" (See Addendum)

10. What kinds of "defenses" might neurotics reveal during psychotherapy? How could a therapist help them learn better ways of using defenses? (See Addendum and reading assignment).

11. How do "neurotic" disorders differ from "psychophysiological" disorders? What do they have in common?

23. Psychotic Behavior

READING ASSIGNMENT: 501-507; 507-510; 511-512. Preview "Questions and Problems", p. 135.

I. Introduction

Maladaptive nature of psychotic behavior

Inadequate response to environmental demands

Inappropriate coping with problems of living

Inadequate progress toward goals

Interference with others

and

Loss of contact with reality

Psychotic behavior deviant and bizarre

II. Signs indicating loss of contact with reality (i.e., deficiencies in testing reality)

A. Hallucinations: disorders of perception

Mimic normal perceptions but occur in absence of external stimuli

Contradict normal, adaptive behavior. WHY?

Drug-induced hallucinations: temporary effects

mescaline
psilocybin
LSD (lysergic acid diethlamide)

B. Delusions: disorders of thinking

"False beliefs that resist change in spite of contradictory evidence..."

Some typical forms

Grandeur

Paranoid

Persecution

Illustrations
(Recreated, based on actual case material)

Note the "split" between affect and cognition - typical of schizophrenic behavior)

C. Other bizarre and distorted forms of communication

Illustrations

D. Depression

Pervasive sadness and melancholia

Self-hatred

Suicidal tendencies

Illustrations

E. Bizarre motor behavior

Excessive and inappropriate physical activities

Illustrations

Withdrawal

Apathy and stereotyped posturing (as in catatonic forms of schizophrenia)

Illustrations

F. Disorientation

Time

Names

Places

May be associated with organic damage, or occur independently of it

Illustration
(Re-created, based on actual case material)

III. Basic characteristics and standard psychiatric classifications: viewpoints and conclusions for discussion

How related?

What do "standard classifications" have in common?

How differ from signs of psychosis presented here?

How can psychotic behavior be alleviated?

(See Reading Assignment for help in answering these questions).

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. How does psychotic behavior differ from neurotic behavior? Do they have anything in common?
2. Why do hallucinations "contradict normal, adaptive behavior?"
3. What is the "split" that is characteristic of schizophrenic behavior?
4. How do schizophrenic disorders differ from manic-depressive disorders?
5. How can psychotic behavior be revealed through "bizarre motor behavior." Give examples.
6. What are some of the advantages of "standard psychiatric classifications?" Can you think of possible disadvantages?
7. How do "personality disorders" differ from psychoses?
8. How do the organic psychoses ("chronic brain disorders") differ from schizophrenia and manic-depressive psychosis?

24. Somatic and Psychodynamic Therapies

A Self-study Topic

READING ASSIGNMENT: 514-531.

Class sessions on November 18 and 19 will be used to discuss this topic. Work through it before coming to class. You will then be in a better position to discuss the material you were most interested in or had particular difficulties with.

Your Section Instructor will give you additional information about the class activities for this topic and how to prepare for them.

For Study and Discussion

1. (a) Describe briefly the main kinds of somatic therapy now being used. (b) What are their advantages? Disadvantages?	
2. Explain the following characteristics of psychoanalytic therapy and give examples of each characteristic: (a) free association; (b) resistance; (c) dream analysis; (d) transference; (e) insight.	

3. (a) What are the main problems in trying to evaluate the relative effectiveness of different approaches to psychotherapy? (b) Can any of these problems be solved? Explain.	
4. What are the main objectives of group therapy (encounter group and other approaches.)? What are some problems in evaluating their effectiveness? What are some advantages over individual psychotherapy?	
5. (a) What is meant by "community mental health"? (b) What are its objectives? (c) What methods are used to obtain these objectives?	

NOTES

25. "Reinforcement Therapy"*

READING ASSIGNMENT: 531-544; 544-550. Preview "Questions and Problems", p. 140.

This film illustrates three approaches to using reinforcement principles in behavioral therapy:

I. Therapy with autistic children.

The opening portion of the film shows some of the techniques developed by Dr. Ivar Lovaas at the University of California Neuropsychiatric Institute to teach autistic children to speak.

Four seriously disturbed children are shown, who had not been previously responsive to more traditional forms of psychotherapy. These children revealed practically no social responsiveness, and engaged in much bizarre and repetitious bodily movements.

To teach these children how to communicate with speech, the therapist used a modeling-reinforcement method, consistently reinforcing the children as they reproduce the modeled responses.

Notice that as the treatment proceeds more complex kinds of reinforcement are used (verbal approval, affection, play, etc.) as compared with the earlier reinforcements of food.

II. Therapy with retarded children.

The second part of the film shows how reinforcement techniques have been used to teach academic subjects to retarded children at the Ranier School in Washington. Under the supervision of Dr. Sidney Bijou (now at the University of Illinois) and Dr. Jay Birnbrauer, children work at their own pace with programmed instructional materials. Their achievement is rewarded with marks that can be exchanged for various items at a store in the school.

* Thanks are due to Smith Kline & French Company for special permission to videotape this film.

These children had previously disliked academic work. Under this system they assume personal responsibility for their study--checking out their own instructional materials, keeping a log on their daily work, and working productively and enjoyably with little external direction from the teacher.

III. Token reinforcement in a hospital

The third part of this film was made at the Patton State Hospital in California, and shows a token reinforcement system being used with a group of chronic schizophrenic women.

The procedures are based primarily on the work of Dr. Teodoro Ayllon. Attractive sleeping facilities, meals, and many ward privileges must be purchased with tokens that the patients can earn by performing "socially desirable behavior."

Note that the contingency programs are based on the typical animal conditioning model: reinforcing immediately after a desired performance. (See "Questions and Problems for Study and Discussion")

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. What roles did "contingencies" play in the various reinforcement techniques shown in the film?

2. How would a behavioral therapist decide what "reinforcers" to use?

3. What other principles of operant conditioning were employed in the therapy procedures, other than "reinforcement"?

4. The contingency programs shown in the Patton Hospital demonstration used immediate reinforcement with tokens. Do you think this immediacy was necessary for effective changes in social behavior? In answering this question consider the superior cognitive abilities of human beings, as compared with animals, and how this kind of cognition can mediate a delayed reinforcement conti-contingency. (Recall Unit III, and especially the videotape "Tools of Thought").

UNIT EIGHT

Social Interaction

Professor Frank Costin

26. "The Social Animal"

Preview "Questions and Problems", p. 143.

This film illustrates some of the problems social psychologists investigate. Three different experiments are demonstrated.

I. Dr. Stanley Schachter shows how group pressure can change opinions.

One person in a group is trained to take a certain position that is different from that of the other members.

What effect does he have on the other members?

Why do such effects occur?

Note how Dr. Schachter explains the experimental data to answer these questions.

II. Dr. Leon Festinger, who has been a leader in the development of cognitive dissonance theory, demonstrates an experiment to answer this question:

What happens when people are forced to say something they don't believe?

Note how Dr. Festinger interprets the results of the experiment.

III. Dr. Morton Deutsch demonstrates an "experimental game". In order for the participants to make a profit in this game they must not only compete but must also cooperate.

Note the variables that are introduced to permit answers to these questions:

How does bargaining work?

What happens to the bargaining process when conflict increases?

What happens when threat is introduced into the bargaining situation?

IV. After you have answered the questions in I, II, and III, turn to the "Questions and Problems" on page 143.

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Summarize briefly what the independent and dependent variables were for each of the experiments demonstrated.

2. One of Festinger's findings infers that the subject who was promised $20.00 didn't change his feelings about the task because he did not experience "dissonance". Why didn't he? Do you think it would always work this way? Explain.

3. Deutsch's experiment centers around the resolution of conflict. Are the consequences of this kind of conflict necessarily negative? Can conflict be socially useful? Explain. Illustrate with specific examples.

4. Social-psychological experiments, such as those which were demonstrated, face special difficulties. What are some of these difficulties? How do they differ from those carried out in other kinds of experimental situations? How could failure to recognize these special difficulties lead to dubious interpretations of results?

27. Social Influences on Behavior

A Self-study Topic

READING ASSIGNMENT: 400-425.

Class sessions on December 2 and 3 will be used to discuss this topic. Work through it before coming to class. You will then be in a better position to discuss the material you were most interested in or had particular difficulties with.

Your Section Instructor will give you additional information about the class activities for this topic and how to prepare for them.

For Study and Discussion

1. (a) What are the main positions relating to sources of human aggression (e.g. Freud, Lorenz, and Bandura). (b) How do these fit in with the "nature-nurture" controversy? (c) Can they be reconciled? Explain.	
2. (a) What is meant by status and role? (b) Why are they important concepts in explaining social determinents of behavior? Give examples.	

3. Research has shown that whether or not not bystanders will aid in a "street emergency" depends on a number of crucial variables. (a) What are those variables? (b) Give examples to illustrate your answer.	
4. (a) How does a person's physical attractiveness affect other people's judgments? Give examples. (b) Are there sex differences in the relationships between physical attractiveness and others' judgments? Explain. (c) How do the "matching hypotheses" help explain the findings of research in this matter of physical attractiveness and other people's judgments?	

NOTES

28. Social Perception

READING ASSIGNMENT: 425-429. Preview "Questions and Problems", p. 149.

I. Perception as a dynamic process: meaning

- Some typical visual illusions
- Importance of interpretation
- Perceptions not duplicates of external stimuli

II. Meaning of "social perception"

- "Interpersonal perception" the focus
- Examples of broad questions social psychologists ask
  - How can immediate impressions influence later impressions?
  - How do perceptions influence physical attraction?

III. Some illustrative research in social perception

A. The "primacy effect"

- Re-creation of Kelly's experiment
  - Initial situation
  - Distribution of "biographical notes"
  - The "crucial sentence"
  - "Guest lecturer" makes presentation
  - Students rate lecturer's personal characteristics
  - Results and interpretation

B. Social perceptions and individual differences in personality

1. Correlates of heterosexual somatic preferences

Demonstration of Wiggins-Conger study*

Pairs of female silhouettes shown to male students

Students expressed preferences

Prefer A				Prefer B		
3 strongly	2 moderately	1 mildly	0 no preference	1 mildly	2 moderately	3 strongly

Description of somatic features rated

Personal data gathered

2. Results

Some relationships between personality, behavior, and bodily preferences

Sample of findings

Trait or behavioral tendency	Bodily preference
Center of attention	
Frequent dating	
Independent	
More introverted	
More dependent	

* For a popular account of this research, and a "preference test", see "Playboy's Girl-Watching Quiz," Playboy, January, 1971, pp. 213-216; 218, 221.

C. Some follow-up work: an interview with Professor Nancy Wiggins

1. Correlations between women's physique and personality traits

Techniques of measurement

Some results: comparisons with previous study of men's preferences

Women with large breasts and their personality traits

How were findings related to men's preference for large breasts?

Women with relatively large hips and their personality traits

How were findings related to men's preference for large hips

Consistency of parallel findings

Interpretation of parallel findings

2. How people perceive faces

Procedures using black college students and white college students (all women)

Are black faces perceived differently from white faces?

Interpretation of findings

White students' social sensitivity and expectation

Why the difference between perceptions of blacks and perceptions of whites?

Relationships between ratings of attractiveness and physical features of faces

Some results

IV. Summary of "broad questions"

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. What practical applications can you make of the results of the experiment on "the primacy effect?"

2. Which of the "correlates of heterosexual preference" (Wiggins-Conger study) would you have anticipated on the basis of your own everyday observations? Why?

3. Are there any results of the Wiggins-Conger study which you think reveal evidence of so-called "male chauvinism?" Defend your position.

4. Summarize briefly the results of the studies mentioned by Professor Wiggins in the interview. Do you agree with her "plausible hypotheses" in interpreting the results? What other interpretations do you think are equally as "plausible"?

5. Wiggins stated that her research with Professor Larry Jones showed the importance of the eyes in determining physical attractiveness. Why should this be?

6. Can you think of any other factors that might determine why people are physically attracted to each other?

* Sources from which specific data were cited.

29. Social Attitudes and Prejudice

READING ASSIGNMENT: 376-399. Preview "Questions and Problems", p. 152.

I. Some basic characteristics of social attitudes: illustrations

A. Must specify object, person, or situation attitude is directed toward

B. Must infer attitudes from behavior - cannot be observed directly

C. Attitudes tend to be consistent - i.e. relatively stable states

D. Affect - the core of attitudes

A definition: "An attitude is a learned predisposition to respond to any object, situation, or person, in a consistently favorable or unfavorable way."

II. Using persuasion to change attitudes: combining information and threat

A. Using severe threat with information:

Smoking and lung disease: illustrative film sequence

Results of experiment

Experimenters' conclusions

B. Using "mild" threat with information: a "soft sell"

Illustration

Compare with lung sequence

III. Social prejudice: "prejudgments which represent unfavorable attitudes toward a person or group."

A. Some dynamics

1. "Prejudice may be profitable."

Illustration

2. Changing behavioral manifestations of "prejudice for profit" by challenging economic interests

Illustration

3. Battling "prejudice for profit" by bettering one's own economic position

Illustration

4. Prejudice as "conformity" and prejudice as "overgeneralization"

Illustrations

"Conformity"

"Overgeneralization"

Caution: overgeneralizing may be a rationalization for prejudices developed earlier

5. Projection

Explanation

B. What further dynamics do you perceive in these students? How can prejudice be reduced?

QUESTIONS AND PROBLEMS FOR STUDY AND DISCUSSION

1. Why is "affect" an indispensable element in defining attitudes?

2. Cite some practical applications of the results of studies on "persuasive communication".

3. State some specific examples from your own experiences to show how "conformity" and "over-generalizing" work in producing or maintaining prejudice.

4. Cite specific examples from your own experiences to show how "defense mechanisms" can be used to support one's prejudices.

5. Suppose you did not wish to accept Freud's assumption that "projection" is an "unconscious" process. Could you continue to use the concept of "projection" to help explain certain dynamics of prejudice? Explain.

GUIDE TO FINAL EXAMINATION

The Final Examination will include Units V - VIII only, and will be based on:

- videotape presentations and reading assignments
- "Questions and Problems for Study and Discussion" which follow the videotape presentations
- Self-study Topics

The examination will consist of 100 multiple-choice items, designed to measure your knowledge of vocabulary and concepts; methods of investigating phenomena; principles; theories; and other empirical generalizations. It will also measure your skill in interpreting or applying such knowledge. (See Appendix C for sample items, classified according to these objectives.)

Suggestions for studying: See "Guide to Mid-semester Examination", page 66.

The date, time and place of the Final Examination will be announced by your Section Instructor.

Appendix A

SOURCES CONSULTED IN PREPARING VIDEOTAPES, ADDENDA, AND SELF-STUDY TOPICS
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*Maher, B. A. Principles of psychopathology. New York: McGraw-Hill, 1966, p. 7.

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Millon, T. Modern psychopathology: A biosocial approach to maladaptive learning and function. Philadelphia: Saunders, 1969.

Sarason, I. G. Abnormal psychology: The problem of maladaptive behavior. New York: Appleton-Century-Crofts, 1972.

*Suinn, R. M. Fundamentals of behavior pathology. New York: Wiley, 1970, p. 386.

Somatic and Psychodynamic Therapies

Morgan, C. T. and King, R. A. Introduction to psychology (5th edition). New York, 1975.

Social Attitudes and Prejudice

Allport, G. Psychology of prejudice. Garden City, New York: Doubleday (Anchor Books), 1958.

Brown, R. Social psychology. New York: Free Press, 1965.

*Cohen, A. R. Attitude change and social influence. New York: Basic Books, 1964.

Fishbein, M. Readings in attitude theory and measurement. New York: Wiley, 1967.

Holmes, D. S. Dimensions of projection. Psychological Bulletin, 1968, 69, 248-268.

*Leventhal, H. and Niles, P. A. A field experiment on fear arousal with data on the validity of questionnaire measures. Journal of Personality, 1964, 32, 457-479.

Sarason, I. C. Personality: An objective approach. New York: Wiley, 1966.

*Schrieke, B. Alien Americans. New York: Viking, 1936.

Watson, G. Social psychology. Issues and insights. (2nd edition). Philadelphia: Lippincott, 1972.

Social Influences on Behavior

Morgan, C. T. and King, R. A. Introduction to psychology (5th edition). New York: McGraw-Hill, 1975.

Social Perception

Aronson, E. The social animal. San Francisco: W. H. Freeman, 1972, pp. 203-233.

Kaufmann, H. Social psychology: The study of human interaction. New York: Holt, Rinehart, Winston, 1973, pp. 262-301.

*Kelly, H. H. The warm-cold variable in first impressions of persons. Journal of Personality, 1950, 18, 431-439.

*Wiggins, J. S., Wiggins, N. and Conger, J. C. Correlates of heterosexual somatic preference. Journal of Personality and Social Psychology, 1968, 10, 82-89.

Appendix B

SUGGESTED SUPPLEMENTARY READINGS

Collections of readings from Scientific American. San Francisco: Freeman, 1966, 1967, 1969.

Frontiers of psychological research
Psychobiology
Science, conflict and society

Collections of readings from Psychology Today. Del Mar, California: CRM Books, 1969, 1970.

Readings in clinical psychology today
Readings in developmental psychology today
Readings in educational psychology today
Readings in experimental psychology today
Readings in psychology today
Readings in social psychology today

Other collections of readings

Bugental, J. F. T. (Ed.) Challenges of humanistic psychology. New York: McGraw-Hill, 1967.

Guthrie, R. V. (Ed.) Encounter: Issues of human concern. Menlo Park, California: Cummings, 1970.

Guthrie, R. V. (Fd.) Psychology in the world today. Reading, Massachusetts: Addison-Wesley, 1968.

Pronko, N. H. (Ed.) Panorama of psychology. Belmont, California: Wadsworth, 1969.

Sutich, A. J. and Vich, M. A. Readings in humanistic psychology. New York: Free Press, 1969.

Wertheimer, M. (Ed.) Confrontation: Psychology and the problems of today.

Wilcox, R. C. The psychological consequences of being a black American: A collection of research by black psychologists. New York: Wiley, 1971.

Cohen, Jozef. (Ed.) Eyewitness series in psychology. Chicago: Rand-McNally, 1969, 1970.

Each illustrated booklet contains detailed coverage of a particular area:

Complex learning: II. Human skill and memory
Operant behavior and operant conditioning
Personality assessment
Personality dynamics
Secondary motivation: Personal motives
Secondary motivation: Social motives

Selected paperbacks on existential psychology and related humanistic issues:

Brennecke, J. H. and Amick, R. G. Significance: The struggle we share. A book of readings. Beverly Hills, California: Glencoe Press, 1971.

Brennecke, J. H. and Amick, R. G. The struggle for significance. Beverly Hills, California: Glencoe Press, 1971.

Giorgi, A. Psychology as a human science. New York: Harper and Row, 1970.

Jourard, S. M. Disclosing man to himself. Princeton, New Jersey: Van Nostrand, 1968.

Jourard, S. M. The transparent self. Princeton, New Jersey: Van Nostrand, 1964. (An Insight Book)

Laing, R. D. The divided self. Baltimore: Penguin Books, 1965. (A Pelican Book)

Maslow, A. H. Religions, values, and peak-experiences. New York: Viking Press, 1970. (A Compass Book)

May, R., Angel, E. and Ellenberger, H. F. (Eds.) Existence: A new dimension in psychiatry and psychology. New York: Simon and Schuster, 1967. (A Clarion Book)

May, R. (Ed.) Existential psychology. (2nd ed.) New York: Random House, 1969.

May, R. Psychology and the human dilemma. Princeton, New Jersey: Van Nostrand, 1966.

Moustakas, C. Creativity and conformity. Princeton, New Jersey: Van Nostrand, 1967. (An Insight Book)

Mowrer, O. H. The new group therapy. Princeton, New Jersey: Van Nostrand, 1964. (An Insight Book)

Smith, R. W. (Ed.) Guilt: Man and society. Garden City, New York: Doubleday, 1971. (An Anchor Book)

Thomas, C. W. Boys no more: A black psychologist's view of community. Beverly Hills, California: Glencoe Press, 1971. (Insight Series)

Appendix C

SAMPLE TEST ITEMS

The following items are arranged according to the objectives listed on page 2.

* A good study method is to answer the items and then check your responses by reviewing relevant content in the videotape presentations, reading assignments, or self-study topics.

* Practice understanding the concepts, principles, empirical generalizations, etc. represented by the correct answers, rather than merely memorizing the answers, since none of the items to be used in examinations will appear exactly as presented here.

* Studying these examples will also enable you to become familiar with the style of the items to be used in examinations.

Directions: For each question or incomplete statement, choose the ONE response which BEST answers the question or completes the statement.

Technical vocabulary and concepts

In the S-O-R model of a laboratory experiment, the S is:

A. an uncontrolled variable.
B. a dependent variable.
C. an independent variable.

Classical conditioning is frequently described as learning through:

A. problem solving.
B. stimulus substitution.
C. drive reduction.

Which of these concepts is a conjunctive?

A. round or red.
B. depth greater than width.
C. round and red.

According to Freudian theory, the reported content of a dream represents:

A. the real meaning of the dream.
B. the actual events of a dream.
C. what is forgotten about the dream.

A child's IQ indicates:

A. the absolute amount of his intellectual ability.
B. the rate at which he has developed intellectually.
C. the amount of his intellectual capacity.

Which of these examples best illustrates projection?

A. The boss rebukes Mr. Smith, who goes home and rebukes his wife.
B. Lil, known to be quite stingy, says: "I just can't stand stingy people."
C. Phil, who secretely dislikes his roommate, makes extra efforts to be kind to him.

Delusions and hallucinations are most characteristic of:

A. neurotic disorders.
B. psychotic disorders.
C. psychosomatic disorders.

Methods of studying behavior

Compared with experiments, the survey method of gathering data is:

A. less scientific.
B. less able to establish cause-and-effect relationships.
C. more difficult to carry out.

If you chose four different graphs of "learning curves" at random, which of these characteristics would they all be most likely to describe?

A. relationship between a dependent variable and practice trials.
B. relationship between correct responses and practice trials.
C. relationship between errors and practice trials.

Which of these is most likely to be an advantage in using computers to simulate human reasoning?

A. Problems may be initiated and problem areas delineated by computers.
B. A computer program may provide a model of human reasoning.
C. Computers may reveal more creative reasoning processes than those found in human beings.

Which of these aspects of emotion is most open to direct observation?

A. feelings.
B. motives.
C. physiological activity.

How are the Wechsler Adult Intelligence Scale and the Wechsler Intelligence Scale for Children most like the 1960 Stanford-Binet?

A. They all employ the MA/CA quotient.
B. They all measure general intellectual ability.
C. They all yield three IQ's: verbal, performance, and total.

The Rorschach Test and the Thematic Apperception Test most closely resemble this method of personality measurement:

A. rating scale.
B. situational test.
C. clinical interview.

In client-centered therapy, a major technique of the therapist is to:

A. teach the client how to reduce his anxiety.
B. uncover the historical reasons for a client's anxiety.
C. show that he accepts the client's feelings.

Which of these statements is the most direct expression of an attitude?

A. "Men are more aggressive than women."
B. "Frustration causes people to become aggressive."
C. "I am afraid of aggressive people."

Principles, theories, and other empirical generalizations

What does a theory do?

A. reduces the necessity for repeating experiments.
B. shows relationships among principles.
C. emphasizes impractical aspects of predicting behavior.

What is the effect of intermittent reinforcement on learning?

A. It makes learning highly improbable.
B. It decreases the rate of responses.
C. It increases resistance to the extinction of responses.

Which of these is most likely to be an advantage in using a computer to simulate human reasoning?

A. Computers may provide models of human reasoning.
B. Computers may initiate problems too difficult for human reasoning abilities.
C. Computers may delineate problem areas which are too complex for human reasoning.

In animals below the primate level, sexual behavior depends most on:

A. habit.
B. previous experience.
C. hormonal secretion.

Which of these is an advantage of a group test of intelligence compared to an individual test?

A. greater economy.
B. easier to motivate subjects.
C. less emphasis on reading ability.

Bandura has carried out experiments with children in which "models of aggression" were used. The results imply that:

A. watching models of violence on TV is not likely to affect children's aggressive behavior.
B. models are ineffective in teaching children to reduce aggressive behavior.
C. children learn aggressive behavior by watching adult models.

A fundamental assumption of behavior therapy is that:

A. an individual's inappropriate behavior is learned as a way of coping with demands from his environment.
B. behavior abnormalities are symptoms of underlying psychic illness.
C. the individual must gain insight into the reasons for his abnormal behavior to be able to change it.

The theory of cognitive dissonance focuses attention on the:

A. amount of polarization to be overcome before consensus of opinion can be reached.
B. aftereffects of decision-making.
C. hostile effects of cognitive conflicts.

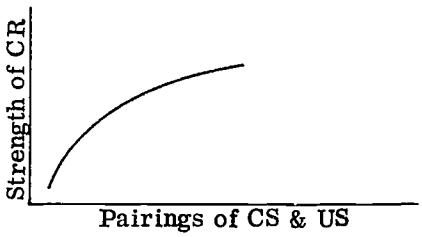
Interpretation or application of concepts, principles, and theories

To determine the relationship between dogmatism and political conservatism, one would be most likely to use:

A. the clinical method.
B. the experimental method.
C. the survey method.

This schematic diagram best illustrates:

A. acquisition.
B. extinction.
C. spontaneous recovery.



What kind of concept includes "all books with red covers and more than 100 pages"?

A. simple.
B. relational.
C. conjunctive.

Suppose that all you know about a child's intellectual performance is the IQ earned on the Stanford-Binet. You can now estimate best:

A. how rapid intellectual development has been.
B. mental age.
C. chronological age.

Scores on a personality test with three different scales were correlated with success in a sales job. Which scale would probably predict success the best?

Scale	Correlation with job success
A. Dominance.	+.35
B. Introversion.	-.20
C. Neurotic tendency.	-.50

Which of these explanations of personality development in a male sociopath is most consistent with Freudian psychoanalytic theory?

A. He failed to identify adequately with his father.
B. He failed to respond strongly to his id impulses.
C. He identified too strongly with a criminal sub-group of society.

A person makes a choice between two alternatives which are equally attractive. Festinger's dissonance theory predicts that the person will:

A. perceive the rejected alternative as more desirable than he did before his choice.
B. continue to perceive both alternatives as equally desirable, but rationalize his choice.
C. perceive the chosen alternative as more desirable than he did before his choice.

Appendix D

PROCEDURES FOR SCHEDULING PARTICIPATION IN PSYCHOLOGICAL STUDIES

1. You will be scheduled for as many as five hours of experimental or other types of psychological investigations during the semester. These hours may be during the day or in the evening.

2. You will be assigned to participate at specific hours, and by appointment. The investigations begin on the hour. Since many of them are timed, it is essential that you be on time. Lateness, even if only five minutes, may result in your not receiving credit for that investigation. Some investigations consist of two parts. If you do not attend both parts, and your absence invalidates the results obtained, you may be marked absent for both hours.

3. You may be asked to go to a waiting room and remain there until the Researcher comes for you. This may occur because of previous experimental runs, or because of the nature of the particular study. Do not assume that because there is no one there your appointment has been cancelled; wait for the researcher.

4. You will be notified of your appointment by mail before the experiment for which you are scheduled.

5. Your appointments will be based upon your availability as indicated on the schedule card you are to complete early in the course. It is essential that you do this accurately as you will be held responsible for the information marked. (See instructions at end of this section.)

6. Your schedule card will be kept on file in the Office of the Department of Psychology. It is your responsibility to maintain the current status of this card. If there are any changes in your class schedule, address or section after you have completed the card, you should have these changes made on your schedule card. Report all changes to the Participant Pool Secretary of the Psychology Department. Come in person (Room 308, Psychology Building), or, if you are handicapped, phone 333-0631.

7. Once you are scheduled for a study (that is, once a post card is sent to you), you are obligated to attend at the appointed time. If you do not receive the post card because your address is incorrect on your schedule card, or if you are unable to attend because your schedule is out-of-date, your absence will be considered an unexcused absence.

8. The following marks will be used:
   a. Attended - Credit is given.
   b. Unexcused Absence - No credit given and no opportunity for rescheduling permitted.
   c. Excused Absence - No credit given, but opportunity for rescheduling of experiment is arranged. If it can not be arranged through the original Researcher, the subject is returned to the pool and scheduled for another experiment.

9. Only a very limited number of reasons are acceptable as excuses from appointments. Acceptable reasons are as follows:
   a. Illness. You should report illness to the Researcher prior to the time of your appointment. You must give the researcher a written excuse from a valid authority when you are once again able to attend classes.
   b. Hourly exams. In order that the occurrence of an hourly examination in a course for which you are enrolled be acceptable as an excuse from an appointment, the examination must be held at the same hour as the hour to which you had been assigned. To be excused you must notify the Researcher before the appointed time; you must also obtain a form from the Participant Pool Secretary in Room 308 which is to be signed by the instructor who is giving the hourly examination and is to be returned to the Researcher.
   c. Other course activities. Certain activities, other than examinations, which pertain directly to courses of study (e.g., field trips) will be considered as acceptable excuses from an appointment. In any case, you must notify the Researcher well before the time for which an appointment has been made for you.
   d. Other exigencies. Situations may arise which are not covered by a, b, or c as stated above. In such instances you should explain to the Researcher the reason you must change your appointment, and present a written excuse from a valid authority. Whenever possible, you should do this before your appointment time.

10. You will notice that for all excused absences it is your responsibility to contact the Researcher whose name and phone number appear on your post card notification. Do not call the Participant Pool Secretary unless there is some conflict with the Researcher. It is the Researcher's province to decide on the validity

of your excuse and any rescheduling must be done through him. In most cases, if you phone the Participant Pool Secretary to accept an excuse or reschedule an appointment, you will be referred back to the Researcher.

The inclusion of your name in the Participant Pool is your responsibility, as is the insurance that you filled out the correct address on the yellow card. IF BY THE MIDDLE OF THE SEMESTER YOU HAVE NOT YET RECEIVED A NOTIFICATION, CHECK WITH THE PARTICIPANT POOL SECRETARY TO MAKE SURE YOU HAVE BEEN INCLUDED.

INSTRUCTIONS FOR FILLING OUT SCHEDULE CARDS

Fill in the current date and your social security number.

Print nearly your name and address where appointment cards should be sent. If your address is in the University Housing list it as (name of Hall _____ Hall URH. Fill in your local phone number.

Sex: Circle "M" or "F".

Year: Circle one or write other in margin.

Discussion Section: Fill in the letter of the section. Ask your Section Instructor (T.A.) if you are uncertain. This must be accurate as credit for attendance is distributed through this item.

Write YES if you are taking both Psychology 100 and Psychology 101.

Put "X" in one box for left or right handed.

Contacts: Put "X" if you wear contact lenses.

Eye glasses: Put "X" if you wear glasses all the time.

Handicapped: Put an "X" in the appropriate box. Leave blank if no handicap.

Schedule: Put an "X" in spaces indicating when you are in classes, working, or at a regular weekly meeting. This is very important and must be done accurately. The computer functions only in full hours - if you are not available for only a portion of an hour, you must still mark that entire hour, i.e., If your class meets from 2:00 until 3:15 you are not available at either 2:00 or 3:00 and "X's" should be placed in both hours. Attendance is a required part of course activity. Unreasonably full schedules which prevent scheduling will be investigated and appropriate action taken.

Return the card promptly to your section instructor

RIGHTS OF STUDENTS

The Psychology Department's Committee on Participants for Research thanks you for your schedule card. Please remember that we must be informed of any changes in your schedule so that you are assigned only for those times when you are available.

Students serve in studies of considerable variety. Naturally, some are found to be more interesting and instructive than others, and some students may find a particular session of more interest than other students do. Obviously, the validity of these studies depends on the willingness of subjects to respond honestly. We believe that research suffers if subjects are resentful or uninterested during the collection of data.

Therefore, we remind you of your right to choose not to participate in a study if, after it is explained to you, you find it objectionable. That is, if it offends your moral, ethical, or religious convictions. Further, if during a session you can no longer respond adequately, you should terminate your participation. You will not be penalized for conscientious refusal to participate.

After each session, the researcher will provide you with information about the research, including references for further reading. We welcome your reactions to such "debriefing." If you ever are not debriefed, or you feel that your information about an experiment was insufficient or inadequate, please tell your instructor or the Participant Pool Secretary.