

INTRODUCTION TO BEHAVIORAL SCIENCE

Deane H. Shapiro, Jr., Ph.D.

OUTLINE OF LECTURE FOR BEHAVIORAL SCIENCE 1 January 4, 1989

1. Understanding the beliefs, biases, and preconceptions we bring to the topic of behavioral science
 - 1.1 Understanding Terms: "Behavioral Science"; what is a "Science" of human "Behavior"?
 - 1.2 What are the scope and limits of science?
The relationship of science to the humanities; to values?
 - 1.3 What is the way in which we define human behavior, and what assumptions might there be in our view
 - i. what is "normal"?
 - ii. what is "abnormal"?
 - iii. What is positive "health"World Health Organization definition in 1946 constitution: "Health is a state of complete physical, mental, and social well-being, and is not merely the absence of disease or infirmity."
 - 1.4 What are the "best" approaches to study human behavior, and what are the assumptions behind each approach?

Theoretical Orientation Inventory.

- A. Variance of Human Behavior attributed to Biology/
to psychosocial factors (3,6,11,14,19,22,27,30)
 - B. Scope and definition of human behavior
(Questions 4,12,15,20,23,28,31)
 - C. Type of Research Strategies best suited to
understanding human behavior
 - i. inductive/deductive (1,8,9,17,24,25)
 - ii. natural/bench (5,13,21,29)
 - iii. statistical/mathematical models
(16,24,32)
 - iv. lawful and predictable? 3,10,18,26
2. Overview of Five different approaches to the study of human behavior, along four different dimensions:
 - 2.1 Dimensions:
 - i. View of the person "as is"
 - ii. Goal of Health
 - iii. Concept of disease etiology
 - iv. Techniques and methodology
 - 2.2 Approaches
 - i. Classical id (Freudian) Psychology
 - ii. Ego (humanistic) Psychology
 - iii. Behavioral/existential
 - iv. Transpersonal
 - v. Biological

3. Continuum views of Pathology

- 3.1 "normal culture" is psychopathological, a consensus trance (Tart);
- 3.2 there is no pathology (Szasz)--problems in living and defined by those in power: political, cultural, gender issues.
- 3.3 NIMH study: (Mumford, pp.603-604): anxiety disorders (8.3%); alcoholism and drug abuse (6.4%); affective disorders (6%); schizophrenic disorders 1%); antisocial personality disorder (.9%). Twenty percent of US population, only 1/5 seek treatment.

4. Research Examples

- 4.1 Rosenhan: "Being sane in insane places"
- 4.2 Weiss "control" study with norepinephrine
- 4.3 Agras: anxiety disorders; eating disorders
- 4.4 Reite (556-Schizophrenia); anxiety and affective disorders (560)
- 4.5 Fride: prenatal stress alters cerebral lateralization of dopamine activity

5. Stress as Clinical example:

- 5.1 Stress and physical health: vulnerability to infectious diseases and/or coronary artery disease
- 5.2 Stress and mental Health (#1 problem for women, #2 for men)
- 5.3 Stress and Medical Students
- 5.4 Defining stress: (different views)
environment (stressful event);
cognitive (response to event)--Lazarus
stress as physiological response (Canon, Selye)
stress as behavior.
- 5.5 Warning signs of stress: from Selye (also eustress/distress); Holmes and Rahe
- 5.6 Self-observation: how do you know if you are feeling stressed: cognitive; somatic; visual.
Shapiro Content Analysis Control Scale for psychiatric patients
- 5.7 Is stressor in your control or outside your control
Issue of Denial (psychodynamic-- article 53)
benefits/problems

6. Stress and Human Control

- 6.1 Studies showing the importance of human control
Langer; Rodin; Taylor
- 6.2 Different ways to obtain "sense of control"
Self-control; control by benevolent other.
Perceived control; 4 quadrants of control;
learned helplessness
- 6.3 Clinical issues: Motivation, decision making, freedom reflex, belief system, responsibility

6.4 Example: Stress prevention:

hot meal (good breakfast); 7 to 8 hours sleep;
regular exercise; no smoking; no (low) caffeine
social support (people you can talk to about
problems); give and receive affection;
able to speak openly about feelings when angry or
worried;
take quiet time for myself during the day;
plan a fun activity at least once a week;

6.5 Adjust/ avoid/ accept

6.6. Other techniques: self-observation : ABC's
meditation (concentrative; opening up)
biofeedback (emg; eeg; temperature; gsr)
progressive relaxation; autogenic training

6.7 Instructions:

slow, controlled, abdominal breathing;
attentional focusing;
thoughts and self instructions;
imagery;
assertive, altering strategies for control
accepting, yielding strategies for control

6.8 Self-Modeling exercise.

7. QUESTIONS/DISCUSSION.

MY BEHAVIORAL SCIENCE INTRODUCTION NOTES

1. Welcome to behavioral science.

1.1 MY GOAL. My own belief--and there will be data to support this belief throughout the course, is that regardless of what specialty of medicine you go into--from family medicine to surgery, from cancer specialty to occupational health --in all of medicine, behavioral science knowledge is important to you.

--As Simmons pointed out in Chapter one, no matter what the etiology of disease, all patients have a psychological reaction to being sick which will effect the course of the disease and treatment; *and the families have a reaction to it*

--there is an increased recognition in research between a close connection between thoughts, feelings (internal behaviors) and disease process; between style of coping and longevity after cancer; between external behavioral patterns such as Type A, and coronary artery disease.

*Dead
Duke*

1.2 SET YOU AT EASE. Let me set you at ease at the start of this talk--it may be the easiest lecture you will ever have. Nothing I will say, and I can guarantee this, will be on the boards. If I do say anything of a factual, test-worthy nature, I promise to repeat it next week on my lecture on stress.

1.3 HARDEST. Now this may be the hardest lecture you have ever had, because my goal is to invite you, at the deepest level at which you are willing, to examine your own belief systems about topics which we normally don't systematically explore, but which we all have beliefs and feelings about.

--beliefs about the nature and purpose of existence; about what human personalities are like; about how disease is caused;

--In particular, the beliefs, biases and preconceptions we bring to topic of behavioral sciences.

--what is the best way to gain knowledge; what is the scope and limits of science;

--scope and definition of human behavior

--variance of human behavior attributed to biology, to psychosocial factors

--type of research strategies best suited to understand human behavior.

--what is health; normalcy; disease; pathology; mental illness.

--Further, as the reading made clear, we're not just talking about patient behavior, but about your behavior, too.

NOT EASY TO DO.

1. Dead People Do Bleed
2. Chernoybl, TMI

*All
great!
you
and
Vicki*

QUESTIONS:

let's start with you. p. 425 in Mumford: extraordinary

