

Classification, Diagnosis, and the DSM

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 HBSE II – Psychopathology
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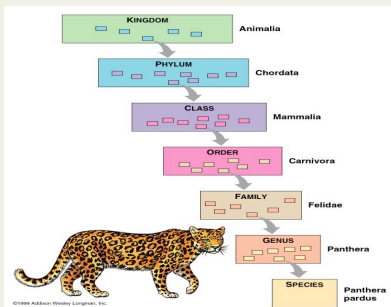
The most important classification in the natural sciences

THE PERIODIC TABLE

The periodic table displays elements from Hydrogen (H) to Oganesson (Og). It is organized into groups (columns) and periods (rows). Key features include:

- Groups:** Labeled I through 18.
- Periods:** Labeled 1 through 7.
- Block Labels:** s, p, d, f blocks.
- Block Numbers:** 1 through 10.
- Block Symbols:** IIA, IIIA, IVA, VA, VIA, VIIA, VIIIA, VIIIA, VIIIA, VIIIA.
- Block Abbreviations:** IIB, IB, IIB, IIB, IIB, IIB, IIB, IIB, IIB, IIB.
- Block Abbreviations:** IIB, IIB, IIB, IIB, IIB, IIB, IIB, IIB, IIB, IIB.
- Block Abbreviations:** IIB, IIB, IIB, IIB, IIB, IIB, IIB, IIB, IIB, IIB.

A famous "hierarchical" classification



The previous classification systems are considered valid and reliable

- Because their concepts have shown a close correspondence to the real world
- Because they allow for precise predictions about matter/animals (their subject matter)
- Because they allow additions of categories without change to the system
- Because their categories are extremely consistently applied by those who use them
- And other reasons

Why classify?

- To simplify and understand our world, and predict occurrences
- To avoid danger and survive
 - Edible vs. poisonous, flammable vs. non-flammable
- To create and maintain group cohesiveness
 - Us vs. Them, Good vs. Bad
- To create the appearance of science

Some definitions (according to a medical model)

- **Nosology:** a classification of diseases
 - The DSM is a nosological system
- **Taxonomy:** the science and techniques of classification
 - Establishing diagnostic groupings
- **Diagnosis:** applying diagnostic groupings to individual cases
 - A matching task
- **Diagnosis** should not be confused with **disorder**

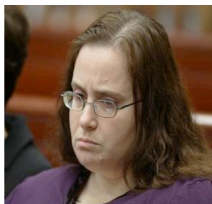
Consequences of psychiatric diagnosis for the diagnosed individual

- Changes to self-image/identity
- How one's problem is viewed / will one recover? / how best to resolve one's problem? / who should help?
- Disability status and access to special resources and income
- Different treatment under the law
- Inclusion in a research study, clinical trial
- Insurance reimbursement for consulting for help
- Credibility may be lowered in many settings (court of law, drivers' license, military, etc.)
- Stigma
- Involuntary/forced treatment (usually if accompanied by some threat of harm)

Consequences of diagnosis?

VIDEO: Three years after 4-year-old Rebecca Riley died, her mother goes on trial

Photos



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The Patriot Ledger

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BROCKTON — Three years after she and her husband were charged, Carolyn Riley was to go on trial today for the alleged overdose murder of their 4-year-old daughter, Rebecca.

Opening statements by prosecutors and Riley's defense attorney were to be made in Plymouth County Superior Court in Brockton before Judge Charles J. Heby. There are nine women and seven men on the jury, and the trial is expected to last three weeks.

Rebecca's father, Michael Riley, is expected to go on trial in mid-February. The Rileys' trials were separated last week at the request of prosecutors.


The Rileys are facing first-degree murder charges. Prosecutors say they deliberately killed the little girl with the powerful prescription drug clonidine — in part, allegedly, because they failed to get federal Supplemental Security Income (SSI) disability payments for her, as they had for themselves and their two older children.

19th US century classification of insanity

- 1840 U.S. census had one category for "idiocy/ insanity"
- 1880 U.S. census had 7 categories
- 1853 *International List of Causes of Death*
- Classification systems were numerous, reflected terms fashionable among medical men of the day
- None enjoyed extensive usage

Emil Kraepelin (1856-1926)
"Father of psychiatric classification"

- German psychiatrist best known for dividing psychosis into "dementia praecox" and "manic depressive psychosis"
- insisted that, in the absence of pathological findings, disorders could be identified on the basis of their *patterns of symptoms*
- this required careful observation of vast numbers of patients, their symptoms and course of "disorders"
- By properly *classifying* patients, research on physical bases of their disorders would be fruitful



Wellcome Images

U.S. Army's Nomenclature of Psychiatric Disorders and Reactions (1946)

- ~ 46 categories of "reactions" within 11 groups of "disorders"
- Huge national WW II draft led to efforts to classify recruits. Combat experiences led to refinements
- Reflected Adolph Meyer's psychobiological view of problems as *reactions*
- Provided 1-2 sentence description of each category

DSM-I (1952)

- First diagnostic manual published by the APA
- ~ 106 diagnostic categories
- Mostly used to collect mental hospital statistics
- Also closely reflected Adolph Meyer's psychobiological view
- Provided thumbnail description of each category

DSM-II (1968)

- ~182 diagnostic categories
- Reflected an effort to make psychiatric diagnoses more compatible with the WHO's *International Classification of Diseases*
- Eliminated the term *reaction*
- Still only provided thumbnail sketches of diagnoses

Development of DSM-III

- Most psychiatrists had Freudian/psychodynamic orientation
 - Diagnosis was based on theoretical formulation, arrived at *after* treatment
- Group of psychiatrists upset with attacks and critiques of psychiatry starting in early 1960s, and psychiatry's turn toward "the social"
- They admired Kraepelin's approach and wished to *remedicalize* psychiatry

Neo-Kraepelinians concerned with problem of reliability vs validity

- **Reliability:** agreement; different clinicians would apply the same diagnosis to the same patient
- Often measured with *kappa* statistic
$$\kappa = \frac{\text{Pr}(o) - \text{Pr}(e)}{1 - \text{Pr}(e)}$$
- **Validity:** Is it real? Is the diagnosis really measuring what it intends to measure?

Development of DSM-III—cont'd

- Organized themselves into the “neo-Kraepelinians,” with the following core principles:
 - Psychiatry is a branch of medicine
 - Psychiatry treats people who are sick
 - There is a boundary between the normal and the sick
 - There are discrete mental illnesses
 - Psychiatry should focus on biological aspects
 - There should be explicit concern with diagnosis and classification
 - Diagnostic criteria should be codified

Development of DSM-III—cont'd

- Turned the “problem of diagnosis” into a problem of *weak reliability* of diagnosis
- Established “Feigner criteria” (1972), then “Research Diagnostic Criteria” (1978) as means to improve reliability
- These formed basis for DSM-III (1980)
- Neo-Kraepelinians marketed and promoted the new classification as “descriptive” and “atheoretical”—expunged all Freudian inferences (such as “reaction” and “neurosis”)

DSM-III (1980)

- Probably the most important psychiatric document of the 20th century
- “before” and “after” DSM-III
- Enthusiastic adoption by the mental health professions post-1980 have anchored neo-Kraepelinian ideas in the whole field of mental health
- One person, Robert Spitzer, was responsible for most of the content of DSM-III

DSM-III (1980)

- ~ 265 diagnostic categories
- **Answer to critique that diagnosis was unreliable:**
 - Provided *explicit criteria* for each diagnosis, in order to increase reliability
 - This is the single major innovation of DSM-III
- **Answer to critique that diagnosis was reductionistic:**
 - Provided a *multi-axial classification*
- **Answer to critique that diagnosis was invalid:**
 - “The new manual will help us solve the problem.”

DSM-III's multi-axial approach

- Axis I: Clinical Disorders
- Axis II: Personality Disorders and Mental Retardation
 - Personality disorders were the main concern of psychodynamic psychiatrists—they were in Axis II because they were downgraded by neo-Kraepelinians
- Axis III: General Medical Conditions
 - Harmonized with the *ICD*
- Axis IV: Psychosocial and Environmental Problems
 - Problems with primary support group/social environment/education/occupation/housing/economy/access to health care/interaction with legal system-crime/other
- Axis V: Global Assessment of Functioning
 - A scale, from 1 to 100: 0-50 serious symptoms, 51-70 mild moderate symptoms, 71-80 normal, 81-100



DSM-III-R (1987)

- ~296 diagnostic categories
- Meant to clarify problems with DSM-III
- Embraced **co-morbidity**, encouraging multiple diagnoses

Together, DSM-III & III-R sold more than a million copies

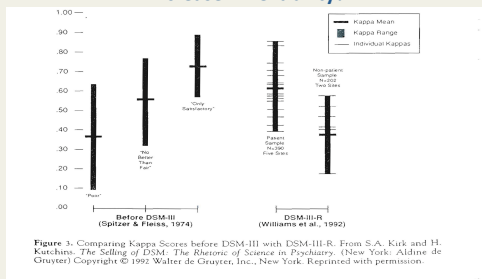
DSM-IV (1994) and DSM-IV-TR (2000)

- ~310-350 diagnoses (depending on how you count)
- Systematic literature reviews and a slightly more transparent process (see *DSM Sourcebook*)
- Promised that any future changes must be data-based

DSM-IV-TR (2000)

- Same number of diagnoses
- Updated literature reviews

Scientific accomplishment: Increase in reliability?



Standards before DSM-III
 "Poor" $k = .35$
 "No better than fair" $k = .55$
 "Only satisfactory" $k = .75$

Research Post DSM-III-R
 Patient sample average $k = .62$
 Non-patient sample average $k = .31$

Main "accomplishments" of DSM III approach: cultural, economic, bureaucratic

- Renewal of interest in the classification of mental disorders
 - Study of classification replaced study of psychopathology?
 - Psychiatric diagnoses became cultural symbols
- Launching of large-scale epidemiologic research (e.g., Kessler study)
 - Large-scale population-based studies could now interview people by phone with structured interviews and generate diagnoses by computer

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DSM's main accomplishments—cont'd

- Acceptance of DSM in several schools of thought (except psychodynamic and humanistic/existential)
- Important financial revenues to the APA from sales of DSMs (> 1 million copies of DSM-III and DSM-III-R) and training materials
- Strengthening of psychiatry's position of leadership in mental health
 - Problem definition remains *psychiatric*
