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An Introduction to Psychopathology

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Operational Definition

Psychopathology, mental disorder, and mental illness have no strict, agreed-upon definition

Historically, conflict over the causes and nature of mental health problems

Currently large amounts of disagreement over what ontological framework to use in the field

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Big Questions

Scientific vs. sociocultural definitions

DSM vs. RDoC frameworks

Biomedical vs. psychobiosocial models

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Conception of Disease

"Classifying a condition as a disease is no idle matter."

Has consequences for

- Researchers
- Therapists
- Courts
- People with that condition
- Benefactors
- Hospitals
- Insurance companies

Reznek (1987)

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Conceptions of Psychopathology

Psychopathology as

- Statistical deviance
- Maladaptive / dysfunctional behavior
- Distress and disability
- Social deviance
- Harmful dysfunction
- Dimensional vs. categorical
- Social construction

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Statistical Deviance

Psychopathology are those behaviors that are statistically deviant or infrequent

Has common-sense appeal

Lends itself to methods of measurement

- Have to determine what is statistically "normal"
- Then determine how far a condition deviates from the norm

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Statistical Deviance

Seems objective and scientific due to reliance on psychometric methods

Still includes large amounts of subjectivity
- Conceptual definition(s) of constructs
- How deviant is too deviant?

Subjective influences have a number of consequences

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Maladaptive / Dysfunctional Behavior

Refers to the effectiveness or ineffectiveness of a behavior in dealing with challenges or accomplish goals

Highly subjective
- Adaptiveness of a behavior can be both situationally based and judgementally based
- Cultural differences impact adaptive level

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Maladaptive / Dysfunctional Behavior

Maladaptiveness is not logically related to statistical deviance
- IQ scores of 130 and 70
- Low depression or anxiety scores

Maladaptive behaviors are not all statistically infrequent and vice versa
- Shyness
- Sexual functioning

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Distress & Disability

Very subjective, similar to maladaptive behavior
- When is someone distressed?
- When is someone disabled?

Pathological conditions may not always cause distress to the person with the condition
- Personality disorders

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Social Deviance

Psychopathology is behavior that deviates from what is socially acceptable
- Same as statistically deviant, but without the objectivity of stats

Norms are socially derived, not scientifically derived, and differ between cultures and time periods
- Masturbation
- Homosexuality

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Harmful Dysfunction

Acknowledges impact of social and cultural values, but proposes objectivity as well

Harmful is based on social norms

Dysfunction is scientific term for failure of an evolved mental mechanism

Pros and cons to this type of a definition

Wakefield (1992, 1999)

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Harmful Dysfunction

Pros

- Has both subjective and objective qualities
- Grounded in a solid scientific theory (evolution by natural selection)

Cons

- Mental mechanisms cannot be objectively measured, so we rely on value judgments
- Changing conception of HD, from trying to define a mental disorder to describing how people define it

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DSM-IV Definition

"...a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk or suffering death, pain, disability or an important loss of freedom....must not be...expectable or culturally sanctioned....must currently be considered a manifestation of a behavioral, psychological, or biological dysfunction in the individual."

clinically significant
distress…or disability
not expectable or culturally sanctioned
dysfunction

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DSM-5 Definition

"...a syndrome characterized by a clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning...usually associated with significant distress in social, occupational, or other important activities. An expectable or culturally approved response to common stressors, such as the death of a loved one, is not a mental disorder. Socially deviant behavior...and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual...."

clinically significant
dysfunction
distress
expectable or culturally sanctioned

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Was any progress made?

In 20 years, did the definition change much?

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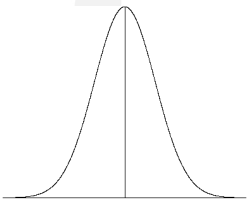
Categories vs. Dimensions

In the categorical models, psychopathology is either present or it is not (dichotomous)

In dimensional models, "psychopathology" is simply the ends of a continuum of behavior



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The Dimensional Model

"Psychological disorders" are extreme variants of normal phenomena and/or problems in living

Not concerned with classifying disorders, but instead measuring differences in psychological phenomena

- Emotion, mood, intelligence, personality, etc.

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The Dimensional Model

Statistical deviation is not always maladaptive, but can be if it leads to inflexibility

Strongest evidence for dimensional model among personality disorders, but also

- Attachment patterns
- Self-defeating behaviors
- Reading problems
- ADHD, PTSD, depression, schizophrenia, et al.

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The Dimensional Model

Unfortunately, real-life often requires caseness or non-caseness

- Insurance reimbursement
- Receiving services at school
- Disability status
- Inclusion in research studies

Creates tension between need for categories and lack of support for them

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The Dimensional Model

The DSM-5, while saying that it recognizes the dimensional nature of mental disorders, works from a categorical framework

"So-called categorical disorders…seem to merge imperceptibly both into one another and into normality…with no demonstrable natural boundaries."

First (2003)

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Boundaries and Comorbidity

The DSM strives to help clinicians differentiate disorders based on discrete characteristics

Subjective nature of categorical disorders does not allow this to occur very frequently, so you see high rates of comorbidity or co-occurrence

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Social Constructionism

If there can be no scientific definition of psychopathology, then what's the solution?

Psychopathology as a social construct

Mental illness and psychopathology are products of our history and culture, not universal, scientific constructs

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Social Constructionism

"Reality cannot be separated from the way a culture makes sense of it."

Conceptions of psychopathology are influenced by sociocultural, political, professional, and economic forces

Mental disorders are invented, but are not myths or not really there, just social constructs

Rosenblum & Travis (1996)

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Why Construction?

Conceptions of mental illness developed from a medical model, which offered many benefits to many persons

A dimensional model "did not demarcate clearly the well from the sick"

The DSM allowed psychiatry to essentially stake out its territory

Wilson (1993)

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From Pattern to Disease

1. Observation of deviation from norm
2. Powerful group decides this deviation needs control, prevention, and/or treatment
3. Deviation is given a scientific-sounding, capitalized name / acronym
4. The now disorder takes on life of its own
   a) People start thinking they have it
   b) Healthcare providers start treating it
   c) Scientists begin studying it

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From Pattern to Disease

Similar to disease construction for physical diseases

"There are no illnesses or diseases in nature."

We consider disease in general something that precipitates death or failure to function

Sedgwick (1983)

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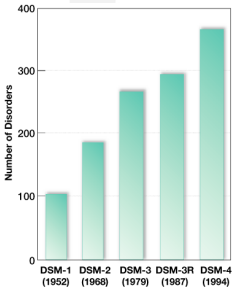
Up, Up, and Away!

The DSM has increasingly pathologized our lives

Nicotine dependence
Caffeine dependence
Hypoactive Sexual Disorder
Orgasmic Disorder
Erectile Dysfunction



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How Should We Construct?

Robins & Guze (1970)

Purported disorder should be able to demonstrate a number of distinguishing characteristics

Cantwell (1996)

Candidate disorder differentiates from other disorders by any / all of: clinical descriptors, psychosocial, demographic, biological, genetic, or family environment factors, natural history, or response to treatment

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How Should We Construct?

DSM definitions fall significantly short of both of these goals

Little support has been found for many of the diagnostic rules in the DSM

- X amount of weeks duration
- X of X symptoms

Even with strict definitions, the way you ask about them can have huge impact on whether or not someone has a "disorder"

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Why Use the DSM Categories?

Simplicity
- We naturally categorize things, and our typologies reflect this
- Dimensional models may be too complex or confusing to be clinically useful

Tradition / credibility
- Diagnosis is very much a part of medicine
- Loss of diagnosis may mean loss of credibility

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Why Use the DSM Categories?

Utility
- Allows for communication between professionals
- Not as clinically useful, however, as it appears

Validity
- Biggest issue, as some research finds support for categorical model…but most support dimensional

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How to Diagnose?

The objective determines implementation of decision making tools

To determine who needs what care

To determine what clinicians do in practice (service research)

To determine who had a "valid" disorder for research purposes

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How to Diagnose, Then?

Use the LEAD standard

Longitudinal,
Expert, and making use of
All available
Data

This includes assessment over time, consultation, and use of multiple informants

Spitzer (1983)

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How to Diagnose, Then?

1. Determine nature of presenting problem (who needs help and why)
2. Evaluate developmental, cultural, and contextual factors impacting presentation
3. Ascertain level of impairment
4. Understand key aspects of problematic behavior pattern(s)
5. Determine presence of comorbidity or other factors that would influence treatment

Jensen & Mrazek (2006)

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A Replacement Ontology?

NIMH has come out with a new model for researching mental disorders, called the Research Domain Criteria (RDoC)

Focuses on being dimensional rather than categorical

Works to incorporate multiple levels of data, as opposed to a single level like the DSM

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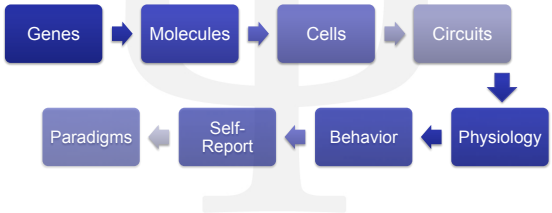
RDoC Levels



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Purpose of the RDoC

"…to create a framework for selecting participants for research studies in order to create a foundational research literature that informs future versions of nosologies *based upon genetics and behavioral neuroscience*.

RDoC is not intended for clinical diagnosis at the current time. "

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RDoC Domains & Constructs

Five broad domains of human behavior and functioning that reflect contemporary knowledge about major systems of emotion, cognition, motivation, and social behavior

Each domain is then broken down into specific psychological constructs (concepts)

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Negative Valence Systems

Primarily responsible for responses to aversive situations or context

- Acute threat (Fear)
- Potential threat (Anxiety)
- Sustained threat
- Loss
- Frustrative non-reward

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Positive Valence Systems

Primarily responsible for responses to positive motivational situations or contexts

- Approach motivation
  - Reward valuation
  - Effort valuation/willingness to work
  - Expectancy/reward prediction error
  - Action selection/preference-based decision making

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Positive Valence Systems

- Initial responsiveness to reward attainment
- Sustained/longer-term responsiveness to reward attainment
- Reward learning
- Habit

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Cognitive Systems

Responsible for various cognitive processes

- Attention
- Perception
  - Visual perception
  - Auditory perception
  - Olfactory / somatosensory / multimodal perception

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Cognitive Systems

- Declarative memory
- Language
- Cognitive control
  - Goal selection; updating, representation, & maintenance
  - Response selection; inhibition/suppression
  - Performance monitoring

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Cognitive Systems

- Working memory
  - Active maintenance
  - Flexible updating
  - Limited capacity
  - Interference control

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Systems for Social Processes

Mediate responses in interpersonal settings of various types

- Affiliation and attachment
- Social communication
  - Reception of facial / non-facial communication
  - Production of facial / non-facial communication

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Systems for Social Processes

- Perception and understanding of others
  - Animacy perception
  - Action perception
  - Understanding mental states

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Arousal/Regulatory Systems

Responsible for generating activation of neural systems as appropriate for various contexts and providing appropriate homeostatic regulation

- Arousal
- Circadian rhythms
- Sleep and wakefulness

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RDoC Assumptions

1. Mental illnesses are brain disorders
2. Dysfunction in neural circuits can be identified with the tools of clinical neuroscience
3. Data from genetics and clinical neuroscience will yield biosignatures that will augment clinical symptoms and signs for clinical management

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Circuitry is the Focus

"While RDoC calls for the study of circuit-based functional dimensions as studied across multiple units of analysis, two additional aspects represent equally important elements of the RDoC framework: (1) neurodevelopmental trajectories and (2) interactions with the environment.

…the RDoC matrix will promote a systematic focus on development and the environment – as well as with their mutual interactions – *and their individual and interacting relationships to specific circuits and functions*."

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Brainless to Mindless?

NIMH's RDoC and the APsychiatricA's DSM are increasingly concerned with the CNS as the most important focus of mental health

For them, psychopathologies are best viewed as "brain disorders"

But is such neurocentrism warranted? Or even useful?

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Neurocentrism

- Brain-based labels *do* diminish blame towards people who have MI
- But they heighten pessimism regarding prognosis, perception of danger of people who have MI, and decrease empathy
- Also focuses treatment and prevention efforts purely at brain level, in opposition to our research findings

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Neurocentrism

This focus on a single level of analysis is damaging to research and to treatment

Instead, a holistic view of psychopathology must be maintained, as it is maintained throughout psychology generally

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Neurocentrism & Psychopharmacology

A focus on "the brain" leads to a focus on treatments used to "fix" your brain – medication in particular

However, strong evidence shows that long-term use of commonly prescribed psychoactives is unwarranted and potentially dangerous

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Long-Term Psychopharm

Research shows that using antipsychotics and SSRIs seems to cause

- Higher rates of chronic problems
- Higher rates of relapse
- More severe relapse
- Higher rates of disability
- Large amounts of side effects

May hold true for other classes as well, like stimulants

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Neurocentrism & the Biomedical Model

Reliance on these single analytic levels appears to have to led to ineffective treatments and little forward diagnostic progress in the last 50 years

However, this biomedical model of disease has many, many adherents in psychiatry, psychology, and beyond

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Biomedical Model

Posits a form of reductionism (eliminative) that would eliminate all levels of analysis above the biological (i.e., psychological and sociocultural)

Psychology becomes just a branch of applied biology, as all is mapped from a neuronal level

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Biomedical Model

Operates from the assumption that healthy is one's natural state of being and any disturbance is thus unhealthy

Ignores large amounts of work in evolutionary and medical sciences showing that "disturbances" are often ways to correct problems

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Biomedical Model

Major research initiatives have found *no* major SNP or allele combinations that can account for a significant percentage of *any* mental disorder

Led to RDoC focus on brain circuitry, rather than gene-level influence

But, why, as environmental influence has been repeatedly found to be the largest influence across all forms of psychopathology?

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Psychopathology as Syndromal

All mental health diagnoses are better thought of as "syndromes" and not "diseases"

- Collections of symptoms, rather than happening due to a particular "root cause"

Biomedical models tend to ignore (directly or indirectly) the history of the person and the context of their behavior

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History & Context *are* Biology

Evolutionary science has shown that our history and the contextual learning an organism engages in can have *long-term* impacts on biology and gene expression

Persists even to *future* generations via processes like methylation and epigenetic changes

Learning and history can build biology, and vice versa

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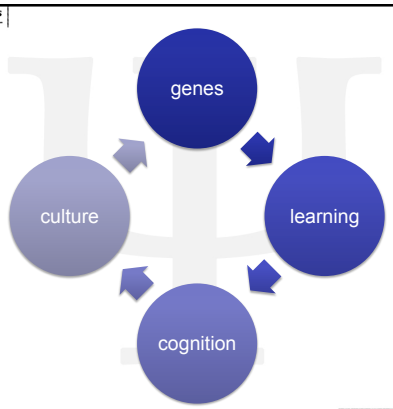

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Evolutionary Psychopathology

Saying "brain" or "genes" cause MI misses huge amounts of evolutionary and systemic information that informs etiology and even treatment

Understanding MI as a normally adaptive behavior gone awry is the core of evo-psychopathology

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Evolutionary Psychopathology

"…the word "psychopathology" would be used when these interacting processes produced self amplifying loops or self-sustaining processes that restrict needed processes of variation, selection, or retention, and/or sensitivity to context, dimensions, and levels."

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Multilevel is the Only Level

Any explanation of *any* psychopathology that relies on only a single level of explanation is deeply flawed

Focusing on all levels allows for greater explanatory power of *why* MI exists as well as *how* to best treat or prevent it

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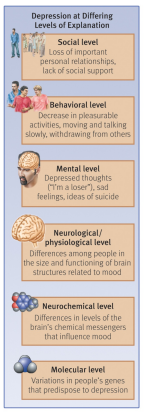

We can't understand psychopathology by focusing on one level, and instead must be able to integrate all of them

"If anything has become clear in psychopathology research over the past decade, it is that the causes of most or all mental disorders are exceedingly multifactorial."

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Major Underlying Causes

Evolutionarily adaptive processes become hijacked and maladaptive due to primarily social forces

- Early trauma, neglect, and abuse
- Social inequalities (in wealth, education, social mobility)
- Poverty (especially in childhood)
- Immediate or chronic stressors
- Bullying and discrimination

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Treatments address Causes

If the major reasons why people experience MI are social in nature, why would we think the best treatments would be biological in nature?

Treatments that directly address the causes and consequences of social forces make more sense (and have stronger evidence to support them)

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Conclusions

Psychopathology is real and can have devastating impacts on people's lives

"Disorders" are all socially constructed (but still important) syndromes

Multilevel (non-biomedical) explanations informed by evolutionary science inform understanding and treatment in effective ways

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