

Behavioral Concepts and Sciences of Human Behavior

Studying Human Behavior: How Scientists Investigate Aggression and Sexuality
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Project: comparative social, ontological, and epistemological analysis of approaches in scientific study of human behavior

Empirical work on
Aggression
Sexual orientation

Approaches reviewed

Quantitative Behavior Genetics
Molecular Behavior Genetics
Neurophysiological behavioral research
Social-Environmental behavioral research
Integrative approaches:
 Developmental Systems Theory
 GxExN (Caspi & Moffitt)
 Multifactorial (Kendler)
Population ("ecological") approaches

1. Argue for a pluralist thesis re interrelations
2. Analyze conceptualization of behavior
3. Reflect on the social life of the research

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2. Analyze conceptualization of behavior
3. Reflect on the social life of the research
 - social stereotypes and implicit bias
 - externally: looping effects
4. Change the question(s)?

Focus on aspects of concept formation and ontology

- 2a. Concept formation in behavioral sciences: operationalization and measurement
- 2b. Factors in operationalizations and construction of "object of inquiry"
- 3a. Interaction of internal and contextual aspects of research
- 3b. Social consequences
4. Ontological alternatives (and associated research alternatives)

Part 1

Constructing studiable objects

AGGRESSION IN ANIMALS

Operationalized as

- i. stereotyped motor behavior (flank marking)
- ii. offensive reaction to 'intruders' in cage
- iii. maternal (protective) aggression
- iv. sexual competition
- v. others

Observation in the wild or intervention on laboratory animals.

AGGRESSION IN HUMANS

- i. conviction of violent crime
- ii. fighting in prison
- iii. delinquency (including truancy and drug use)
- iv. violent rage (verbal or physical)
- v. anger, irritability, verbal aggression
- vi. hitting a doll
- vii. assault

viii. diagnosis of Antisocial Personality or Oppositional Defiant Disorder or Childhood Conduct Disorder

- ix. score on psychological testing instrument
 - a. B-D Hostility Inventory
 - b. Aggression subscale of Child Behavior Checklist
 - c. Gray and Cloninger personality dimensions (impulsivity, anxiety, reward dependence)
 - d. Others

Methods:

Behavioral index measured by

- other (parent or teacher) report;
- self report;
- clinical observation;
- public records.

Research effort:

Associate frequency of or variation in measured behavioral index in members of a study population with genetic, hormonal, neuronal, social factor or some combination.

Assumption: All measure same behavioral disposition: aggression

(note some distinguishing of delinquency and aggression, but reviews tend to include both)

Note: these all involve action of one individual against another (or surrogate).

Not the aggression of soldiers, police, or prison guards

And the behaviors, through operationalization, are described independently of the contexts in which they are meaningful actions towards or against another.

Sexual behavior in (non-human) animals

Mounting (male typical)

Lordosis (female typical)

Sexual orientation:

Sex of animal towards which mounting or lordosis displayed

Display of sex atypical behavior

Sexual Orientation--Kinsey

- Exclusively heterosexual
- Predominantly heterosexual, only incidentally homosexual
- Predominantly heterosexual, more than incidentally homosexual
- Equally heterosexual and homosexual
- Predominantly homosexual, but more than incidentally heterosexual
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Sexual Orientation -- Whalen, Geary, and Johnson

Orthogonal dimensions:

- degree of arousability,
 - frequency of sexual interaction,
 - number of partners,
- by
- sexual identity of partner
 - aspects of partner other than sexual identity.

Construction of object of inquiry

- Public phenomena (as generally conceived: vague, imprecise)
- Meaning of object or construct label ("aggression") given through operationalizations -> studyable object -> "abstract common object" / "object of inquiry"
- Object of inquiry = object putatively measured via operationalizations ("construct")
- Semantic process transforms the public phenomenon into an abstract common object through
 - selective elimination, (to what is measurable)
 - re-aggregation (with similarly measurable)

Shared context of origin

- Our interest in behavior lies primarily in the domain of our moral lives and discourse
 - why did so and so do thus and such?
 - what makes so and so act like that?
 - why do so many Xs Φ ?
- Folk psychological system of classification and explanation of action that coordinates with our practices of moral judgment.
 - Behaviors studied will be those about which we have moral (or p concerns

Shared ontological/methodological presupposition

Methodological individualism:

1. The behavior of groups or populations
 - aggregate of behaviors of individuals and
 - thus best studied at the individual level.
2. Causation internal to the individual

In behavioral research on aggression, sexual orientation, gender, others

3 aspects interact in the semantic process

- the shared context of origin, our folk psychology,
- the requirements for creating a studyable object of inquiry, and
- Ontological/methodological presuppositions, especially individualism.

Creation of studyable object

- A) Isolation of phenomena that can be studied, i.e.
 - reliably identified,
 - re-identified as of a particular type, whose frequency can be measured.
- B) Behaviors decontextualized,
 - event types, expressive of individual dispositions
 - represented as participating in natural regularities.
- C) Behaviors (and dispositions) recontextualized
 - classified with other phenomena.

Aggression as object of inquiry:

Individual act of harm directed against another individual originating in or expressive trait internal to the individual

Harm, aggression, and criminality associated through operationalizations

Other forms of harm (state sanctioned military, police, prison guard; indirect (corporate negligence); mob violence; mass defensive) eliminated

Aggression/harm: assault, fighting, injury;
 individual, group, proxy;
 state sanctioned, non-state sanctioned

Criminal conviction
 hitting in school
 rageful episodes
 Self identification
 Clinical diagnoses

Police violence
 military violence
 Prison guard violence

Tobacco manufacturers
 Environmentally polluting
 industries
 Bank lending practices

Sexuality studied as bimodal sexual orientation
 aligns human sexuality with laboratory animal
 sexuality
 empties the space of intersection of sex of
 erotic object and other dimensions of
 erotic orientation
 absorbs the space between the extremes into
 the extremes

	Kinsey 1	Kinsey 2	Kinsey 3	Kinsey 4	Kinsey 5	Kinsey 6	Kinsey 7
Whalen 1							
Whalen 2							
Whalen 3							
Whalen 4							
Whalen 5							
.							
.							

Part 2

How does this process internal to research
 interact with processes external to the
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1. Stereotype reinforcement:

Phenomenon:

Implicit bias studies:

both Euro-American and African-American subjects
 associate African American men with danger (and
 possible aggression against subject)

--Eberhardt and colleagues

Internal to research context

1. Operationalization

- a) aggression frequently operationalized as conviction of violent crime
- b) salience of violent behavior in conceptualization of crime (note exclusion of forms of behavior involved in white collar offenses in behavioral indices of aggression)

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2. Ultimate Research goals:

- aggression studied in context of
- a) interest in understanding crime and violence
 - b) interest in reducing incidence of crime and violent behavior

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Social context of research

1. Extreme overrepresentation of African-Americans (esp men) in state and federal prison (now joined by Latinos)
2. Tendency to conflate incarceration with tendency towards aggression/violence (in spite of majority of incarceration for drug offenses)
3. Tendency in media to emphasize research findings of genetic and (to a lesser extent) neurobiological associations with aggression/violence.
4. History of attributing group traits to shared genetic factors ("IQ")

Research and race

Combination of

- internal structure of aggression research (operationalization and goals) and
- the social context in which the research acquires its social meaning

perpetuates the cultural association of racial identity and (potential/probable) aggressivity/violence/criminality (in spite of apparent fact that most African-American men are initially incarcerated for drug offenses)

Consequences for

- persistence of prejudicial treatment of African American men independently of behavior, i.e. just on basis of racial classification
- attitudes towards the incarcerated (prison conditions)
- attitudes towards released felons (no voting rights, employment and housing difficulties, etc.)
 - Eberhardt: (white) support for prison reform depends on perception of racial makeup of prison population.

Racism doesn't overtly shape the research,

rather a combination of factors internal and external to the research

reinforce (or at least fail to contest) already existing social prejudices.

Internal to the research

1. Practice of collapsing even the Kinsey scale indices to the two extremes: exclusively homosexual and exclusively heterosexual
2. Predominance of sexual orientation as topic studied

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 - Eberhardt: support for prison reform depends on perception of racial makeup of prison population.
- given continued racial segregation and overwhelming proportion of African-American men in prison and hence among those released, continuing deprivation and alienation of African-Americans especially in inner cities

2. Looping (Hacking, 2006) effects?

Sexuality research and erotic orientation

Phenomenon:

Assumption of bimodality of sexual orientation

Social context of research

1. Belief that sexual orientation either biological (genetic) or choice
2. Biological interpretation conventionally associated with greater tolerance
3. Biological interpretation given greater attention in media reporting
4. Pressure on bisexuals to commit one way or the other.

Research and sexuality

4. Pressure on bisexuals to commit one way or the other.
 - interacts with tendency towards monogamous pair-bonding (even if serial),
 - communities congregate around shared sexual preference
 - visibility of “gay community”
 - intermediate status or oscillation among statuses seen as “bad faith” “participating in heterosexual privilege” “self-indulgence” (in context of punitive attitudes towards deviations from normative sexual orientations)

Combination of internal and external contribute to

- construction of “kind” status for Kinsey extremes,
- erotic orientation reduced to dichotomous binary : homo/heterosexuality [vs. multidimensionality of Whalen et al.]
- homosexuality as most salient feature of individual identity of those so labeled.
- Contrary to hope of researchers, homosexuality continues to be vulnerable to social prejudice, since putative identification of biological determinants highlights factors that in principle could be intervened on.

Looping?

Research focus on extremes and social pressures to identify combine to reinforce folk heterosexual-homosexual binary.

Will this discourage bisexuals from identifying as such? Thus in turn reinforcing the folk/research binary?

Part 3 Ontology

Alternative objects of inquiry?
Different questions?

Methodological Individualism

How genes, hormonal exposures, neurotransmitters, social experience (parental treatment, toys, media exposure...), etc.

increase frequency of operationalized expressions of behaviors of interest:

Aggression: criminal conviction, fighting, rage
Sexuality: total same sex vs. total other sex orientation

All measured as properties of individuals

Alternative possibilities re aggression

Arrests for assault

Reports of assaults

Assaults

Incidents of fighting

Violent quarrels

Alternative possibilities re sexual orientation

- Same-sex coupling
- Hetero-sex coupling
- Couplings in context of committed relationship
- One-time "casual" couplings
- Celibacy
- Onanism

All interactions

Involve individuals, but don't denote properties of individuals, but interactional events or event types

These categorizations lend themselves to investigation through other research approaches.

Taking interactions as ontologically basic

Phenomena to investigate

Changes in relative frequencies of each episode/ interaction type

- over time,
- in different forms of community (urban/rural),
- in different societies, (Norway vs. France)
- different kinds of societies (agricultural/ industrialized), etc.

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Changes in relative frequencies and distributions of behaviors (conceived as individual behaviors) within a population -> Property is population property, not group property

Investigate association of variation among populations with

Physical environment: e.g.

- Resource base
- shrinking/expanding;
- Climate variation.

Features of social structure: e.g.

- variations in distribution of wealth, of resource access;
- age structure;
- divisions of labor;
- structures of opportunity and reward
- ...

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INTERIM CONCLUDING POINTS

1. The intended object of research, the phenomenon investigated, is not identical to the common abstract object (shared by a set of research approaches).
 - The intended object is the object as publicly understood
 - The common abstract object is defined through a set of measurable operationalizations.
 - Research produces at best partial knowledge of a limited subset of the behaviors of interest, those identical to the measurable operationalizations.

2. Conflation of the common abstract object with a studiable object obscures the particularity and possible limited generalizability of the empirical studies.

The common abstract object is constructed partially from ordinary language concepts and when science exported back to the public, reinforces the dichotomies of ordinary language.

3. Concept formation in science and ordinary language doesn't create but reinforces belief in inherent group differences
4. The focus on the common abstract object (variation in measurable individual behavior) marginalizes alternative (non-individualistic) approaches.

2. Conflation of the actual phenomenon of interest with a studiable object obscures the particularity and possible limited generalizability of the empirical studies.

The studiable object is constructed partially from ordinary language concepts and, when science is exported back to the public, reinforces the dichotomies of ordinary language.

3. Concept formation in science and ordinary language doesn't create but reinforces belief in inherent group differences

Thank you for your attention!