Today
• Understanding sexual orientation
  – fundamental aspect of human behavior
  – explosion of research over last 15 years
  – Chance to present a recent theory on
    orientation that captures large swath of the data.

Sexual Orientation
• Competing theories for explaining orientation
• Politically charged
• We will attempt to deal scientifically with the issue.

Sexual Orientation
• Historically
  – Search for an account for homosexuality
• Problem
  – Scientific approaches should seek theories for
    whole range of behavior.
“Learning” approaches to orientation

- Sexual orientation is a product of early exposure and experience to sexual stimuli

Gay men and women on average experience same-sex attraction 3 years prior to first homosexual experience (Bell, Weinberg & Hammersmith, 1981)

Openly homosexual parents are not more likely to have homosexual children than heterosexual parents (Zucker, 1995)

Family dynamics

- Do early family dynamics (e.g., domineering mother, passive father) influence orientation?

“No family variables have been strongly implicated in the development of sexual orientation for either men or women” (Bell et al, 1991).

Sexual Orientation

- Question is not “What causes homosexuality” or “heterosexuality”.

- What leads to the use of biological sex as a basis for the selection of sexual partners?

Sexual Orientation

- Three basic facts
  1. Most men and women in our culture have exclusive and enduring erotic preference for opposite sex partners. In other words, biological sex is an overriding criterion.

- Three basic facts
  2. Most men and women in our culture have an enduring and exclusive preference for opposite sex partners.

Sexual Orientation

- Three basic facts
  3. A substantial minority of men and women have an exclusive and enduring preference for same-sex partners.
Genetic influences

• Bailey & Pillard (1991)
  – Prob. of gay given gay sibling (Men)
    - Identical twins .52
    - Fraternal twins .22
    - Adopted brothers .11
    - non-twin biological brother .09

Genetic influences

• Bailey & Pillard, Neal, & Agvei (1993)
  – Prob. of gay given gay sibling (Women)
    - Identical twins .48
    - Fraternal twins .16
    - Adopted brothers .06
    - non-twin biological sister .08

Interpreting genetic factors

• Fundamental problem is how a genetic model that codes specifically for sexual orientation could be maintained.

• Genetic traits that directly reduce reproductive potential should have a hard time remaining common in genome.

Biological correlates

• LeVay (1993)
  – Hypothalamic nuclei are sexually dimorphic

  – Hypothalamic nuclei in gay men are more similar to women than presumably heterosexual men.

Biological correlates

• LeVay’s and other’s work showing neural correlates of sexual orientation do not allow one to conclude causation.

• Example: Expert violinists have slightly different motor maps, probably because of extensive practice at motor control involved in playing violin.

Bem’s “Exotic becomes Erotic” theory.

- Biological Variables
  - Childhood temperaments
  - Sex-Typical/Atypical activity and playmate preferences
  - Feeling different from opposite/same-sex peers
  - Autonomic arousal to opposite/same sex peers
  - Erotic/Romantic Attraction to Opposite/Same sex persons (i.e., Orientation)
Biological influences on childhood temperaments

• Sex differences in aggression in childhood
  – boys 1/2 SD more aggressive than girls
  – boys also 1/2 SD more active than girls

• Twin studies show that gender nonconformity is highly heritable (Bailey & Martin, 1995)
  – Activity levels are correlated between siblings as one would expect if partly genetically determined.

Orientation and gender conformity during childhood

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<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
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<tr>
<td></td>
<td>Gay</td>
<td>Hetero</td>
</tr>
<tr>
<td>Not enjoyed sex-typ. act</td>
<td>63</td>
<td>10</td>
</tr>
<tr>
<td>Enjoyed sex-atyp act</td>
<td>48</td>
<td>11</td>
</tr>
<tr>
<td>Atypically sex-typed</td>
<td>56</td>
<td>8</td>
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<tr>
<td>Most friends of sex</td>
<td>42</td>
<td>13</td>
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Orientation and gender conformity during childhood

Not just retrospective recall that is biased on orientation

Green (1987) - 66 gender nonconforming boys, 56 gender conforming boys all averaging 7.1 years old.

  Assessment average of 15 years later, 75% of gender nonconforming were bisexual or homosexual, 4% of gender conforming

Gender conformity and feelings of difference

• Bell, Weinberg & Hammersmith (1981)
  – Asked whether respondents recalled “feeling different from” same-sex children during grade-school years.
  – Percent “yes”
    • 71% gay men
    • 70% lesbians
    • 38% and 51% heterosexual men and women (resp)

Gender conformity and feelings of difference

• Bell, Weinberg & Hammersmith (1981)
  – Gender non-conforming children’s sense of differences appears to be protracted and sustained through childhood and adolescence.
Exotic becomes erotic

- Central claim of Bem’s theory
  - Feeling of difference leads to later feelings of attraction toward the “different”.

Exotic becomes erotic

- Familiarity and unfamiliarity
  - Evidence suggests that childhood familiarity does not produce erotic or romantic attachment (maybe antithetical to it)
  - Children raised communally on kibbutzim with age-mates. Sex-play is not discouraged and appears intensive during early childhood.
  - After childhood, no sanction against heterosexual activity within peer group.
  - BUT - 3000 marriages between second generation adults in all Israeli kibbutzim, 0 cases of intrapeer group marriage.
  - Thus: being close, becoming familiar, does not lead to attraction

Exotic becomes erotic

- Unfamiliarity and arousal
  - Very common finding that unfamiliarity, novelty produce general physiological arousal (not necessarily sexual) - (Mook, 1987)
  - Spring Break phenomenon?

Exotic becomes erotic

- Arousal and attributions
  - Experience of arousal does not necessarily carry information about the specific source of the arousal

Exotic becomes erotic

- Arousal and attributions
  - Ovid, 1st Century Roman, wrote “Art of Love” and recommended that any man interested in sexual seduction should take the women to gladiatorial tournaments.

Schacter & Singer (1962)

- 2 factor theory of emotions
  - Emotions require arousal and label
  - Participants were administered “suproxin” (actually half given epinephrine, half placebo)
  - Participants then told to wait in a room for 20 minutes to wait for effect of “suproxin”.

Schacter & Singer (1962)

- 2 factor theory of emotions
  - 3 Subject groups
    - Informed - expect effects of arousal, agitation
    - Misinformed - expect itching, numbness, etc
    - Not informed - no information on what to expect.
  - Subjects then exposed to angry or euphoric confederate.
  - Misinformed/Not informed subjects moods moved strongly in direction of confederate, Informed subjects did not.

Arousal and attributions

- Arousal is experienced but we seek some additional cues for the source of arousal.
  - Another Example:
    Male students were aroused by running in place, hearing a tape of a comedy routine, or hearing an audiotape of a murder.
    Then viewed a video of an interview with an attractive woman.
    Attractiveness ratings were considerably higher for aroused men than nonaroused men.

Good links in the evidence

- Good support for biological links with childhood temperament and gender traits
- Good support for trend for gender nonconforming traits in childhood for homosexuals compared to heterosexuals
- Good support for feelings of difference among gender nonconforming children.
- Good support for difference and novelty resulting in increased arousal.
- Good support for misattribution of arousal.

Weak links

- Transition from general arousal around “different” peers to erotic attraction.

What Bem’s theory does well

- Plausible account for genetic links.
- Most links are very well supported empirically.
- Pulls together a large amount of previously disparate findings.
- Offers novel explanations for other findings
  - Gender differences in strength of sexual orientation
- Helps explain very early sense of sexual orientation in gays and lesbians.
Common misconceptions

• Inversion - old notion that homosexuals were “sexual inverts”.
• Bem’s theory places primary emphasis on “interpretation” of difference, not difference per se.
  – Example: Boy growing up in an all female household, and may feel quite different from mother and siblings (of course), but not become gay.
• Minor gender nonconformity may be construed as large, very large gender nonconformity may be construed as small.
  – Boys playing with dolls, girls who like sports, etc.

Common misconceptions

• Theory suggests how to “avoid” homosexuality
  – Probably not, attributions and construal of social situations are interactive, complex.
  – As an aside, “therapeutic” attempts to modify sexual orientation have both generally failed to modify orientation and show generally negative results for patients emotional well being.

Upcoming

• Personality
• Social cognition
• Emotion
• Psychopathology