

**BIOLOGICAL OR CULTURAL
PERHAPS A BIT OF BOTH**



A biological and cultural perspective of casual sex




THE HOOK-UP

Hook-Up (The Un-relationship)

- The most common way young people, male/female and gay/straight people relate intimately to each other (Stepp, 2007)
- Feelings are discouraged
- Doesn't always mean sexual intercourse
- Can be one time, with a stranger, friend, acquaintance, ongoing
- Just to meet a physical need or just for fun.
- Often involve being under the influence of drugs or alcohol (Desiderato & Crawford, 1995).



Appeal of the Hook-Up or Casual Sex

- Exciting-feel as being rebellious, or being caught
 - Adds a sense of mystery
 - Appealing because each partner has no expectations of the other and can be uninhibited
 - Adds a bit of enjoyment to life
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Risks of Casual Sex


- Unknown history of the partner
- Unknown risk of STI's (Sexually Transmitted Infections)
- Even asymptomatic individuals have infections
- Condoms are safer than nothing---but not necessarily SAFE (and therefore, without risk)
- Psychological impact



Theoretical framework

Sexual activity releases chemicals into the brain and this causes emotional bonds between partners.


Chemicals released in the brain can become addictive



Breaking these bonds can cause depression and make it harder to bond with someone else in the future



The Brain is Adaptable

- Not rigid
 - Can grow and adapt
 - Synapses can survive and strengthen we can see them flourish
 - Synapses can disintegrate and we see the brain weaken
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Inside the Adolescent Brain

- MRI-allows observation of the brain as it grows and develops
- Functional MRI-uses MRI to observe how much oxygen a portion of the brain is using
- PET scan-a medical imaging technique that gives a three-dimensional map by measuring the blood flow in a particular area of the body
 - Different areas are highlighted as blood flow increases to areas affected by differing emotions

Prefrontal Cortex

- Explosion of growth of brain neurons
 - In the few weeks prior to birth
 - Just prior to puberty

Some of these areas are strengthened and others not stimulated.

The more a synapse is used the more it becomes ingrained in a personalities and structure of the brain

Prefrontal Cortex

- Responsible for cognitive maturity
- Maturity not necessarily linked to intelligence- possible to be very intelligent but not completely developed in the prefrontal cortex
 - The ability to make sound judgments can be compromised with less maturity
 - Less likely to make sound judgment with younger age

Brain Chemistry


- Neurochemicals
 - Dopamine
 - Makes us feel good when we do something exciting
 - Produces a feeling of excitement or well-being
 - Has a role human behavior, cognition, motor activity, motivation, and reward.
 - Is **Values Neutral**-meaning that it rewards all kinds of behavior without distinction
 - Is a powerful motivator-rewards for risky behavior-(leaving home for independence)-with a feeling of satisfaction

Dopamine

- Overstimulation-can lead to relative resistance of the brain to dopamine
 - Leads to over-seeking the behavior that lead to dopamine release (Needs more “drug” for same “high”)
- Values Neutral
 - Reward for healthy life-enhancing excitement
 - Reward for exhilarating but unhealthy and destructive behavior
 - Use of non-prescription drugs
 - Excessive drinking
 - Thrill-seeking behavior (Speeding, Racing)



Dopamine

- Sex
 - One of the strongest generators of the dopamine reward (McIlhaney & Bush, 2008)
 - Teenagers are vulnerable to falling into a cycle of dopamine reward for unwise sexual behavior
 - This dopamine reward is, however, for married couples because it “addicts” them to each other
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Brain Chemistry

- Oxytocin
 - Important to healthy sex and bonding
 - Primarily active in females
 - Produces a cumulative effect once bonding has begun
 - Is also VALUES Neutral
 - Results in long-term connectedness
 - In America –when marriage is intact it is rare for a woman to have intercourse with someone other than her husband
 - Bonding of the mother and father greatly increases the chance for a child to be raised in a nurturing two-parent home
 - Bonding is not just an emotional feeling-it is more like the effect of adhesive glue, which can not be undone without great emotional pain (Eisenburger & Leiberan, 2004)

Brain Chemistry

- Oxytocin
 - Action of oxytocin
 - Bonding and trust in the other person
 - Causes uterine contractions that cause birth
 - Helps produce the flow of milk to nourish infant
 - Reasons for oxytocin release
 - Meaningful or intimate touching with another individual
 - Sexual intercourse
 - Onset of labor in pregnant woman
 - Nipple stimulation after delivery of an infant

Brain Chemistry

- Vasopressin
 - Causes male brain response during intimate physical contact
 - Leads to a bonding of a man to his mate
 - Helps bond a man to his offspring
 - Is commonly called the “monogamy molecule”
 - Just like dopamine & oxytocin are VALUES neutral
 - Important to the survival of our race

How it affects women


- Teens and sex
 - 4 in 10 girls having sex beginning at 13-14 report having unwanted or forced sex (Wallace, 2008).
 - 4 in 10 girls become pregnant at least once prior to age 20 (and 80% of these are unplanned pregnancies)
 - Sexually active teens are only 25% of those who are sexually active but 50% of the STI's

Chlamydia

- 75% of Chlamydia occurs in people <25 y/o
- Estimates state that by the time a woman reaches age 30, about half will show evidence of Chlamydia.
- Experts estimate infertility rates to double in the next decade (to about 1 in 3)
- Up to 25% of women will get re-infected within 3-6 months



Gonorrhoea

- Rates have increased for two consecutive years
 - Cause of the increase is unclear
 - Rates of drug (Fluoroquinolone) resistant gonorrhoea on the rise and now at 14%
 - CDC now recommends treating all MSM or PID with Cephalosporin therapy
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Human Papilloma Virus (HPV)

- One of the most common STI's in those who are sexually active < 22y/o
- Estimates state 28-46 percent of females affected are < 25 y/o age
- Estimates of 3-5 % of HPV is visible as warts
- Condom use is recommended
- Gardasil is available
- Pap smears annually still important

HIV (In the US)

- 25% of new cases are in people who are age 13-21.
- Increased risks with rectal intercourse
- About 50% of cases each year are from MSM
- Transmission rates different than expected
 - 53% MSM contact
 - 31% male-female contact
 - 12% IV drug use



Syphilis


- Rates have risen 13.8% from 2005 thru 2006
- Seeing an increase in what was considered a preventable problem
- Increased rate among African-Americans- with the rate about 6 fold
- Increase in women
 - First increase in numbers of babies that have needed treatment due to exposure in the womb

Herpes (Type 2)

- One of the most common STI's in the U.S.
- Estimates are that 20-40 % of people have HSV type 2
- Estimates are 50-80% of people have HSV-1
- HSV type 1 can be transmitted by oral/genital contact as well
- Condoms/barriers offer less protection, but still important




Hepatitis (B and C)

- Vaccination from HEP A and HEP B are available and recommended.
 - Infections are spread by contact with blood, semen, IV drugs, or perinatal transmission
 - No vaccine available for type C
 - Rates stable since 1992 for types B and C
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The Next Step: Where do we go now?

- How can we help
 - Teaching correct information
 - Listening to others
 - Fostering communication between those involved
 - Provide a nurturing environment to our children
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Further Suggestions

- Encourage screening and testing for both asymptomatic and symptomatic individuals
 - Encourage safer sex practices as well as abstaining
 - Be open and aware that emotions and physiologic changes are working in concert to impact our lives
 - The culture and biology of the situation may be at work during a situation and it all needs consideration
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Further Research

- More research needs to be done to give consideration to how lifelong bonds are created and nurtured
 - Research needs to be done on how we as nurses can provide culturally sensitive care even when challenged with unusual cultural circumstances
 - We should promote research on disease prevention and follow-up for the different types of infection as well
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