

# **Sexual Risk Behavior of Adolescents**

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# **Topics to be Covered**

**Nature of Sexual Risk Behavior**

**Prevalence of Sexual Risk Behavior**

**Demographic Correlates**

**Historical Trends**

**Developmental Course**

**Etiology**

# **Nature of Sexual Risk Behavior**

## **Some Outcome Variables of Interest**

**HIV Infection**

**STIs**

**Birth of a child**

**Abortion**

**Unintended pregnancy**

**Age at first intercourse**

**Frequency of vaginal sex**

**Frequency of oral sex**

**Frequency of anal sex**

**Freq of unprotected v. sex**

**Freq of unprotected o. sex**

**Freq of unprotected a. sex**

**Number of partners**

**Accuracy of condom use**

**Consistency of condom use**

**Consistency of pill use**

**Accuracy of pill use**

**Use of ineffective birth control**

# **Most Frequently Studied Behaviors In the Social Sciences**

**Frequency of sex**

**Consistency of condom use**

**Number of partners**

**(Age at first intercourse)**

## **Inter-correlations of Risk Behaviors**

**Meta-analyses indicate the different sexual behaviors are correlated, on average, about 0.35 with each other**

**Meta-analyses indicate the different sexual behaviors are correlated, on average, about 0.35 with other risk behaviors (e.g., alcohol use, drug use, smoking)**

**Implication: The behaviors have more unique variance than common variance, suggesting unique determinants must be taken into account in intervention**

**Intervention design implications**

# **Nature of Sexual Risk Behavior: How Not to Build a Theory – Ignore Half the Determinants of Behavior**

**Most theories of sexual risk taking focus on individuals**

**e.g., attitudes, emotions, normative pressures, self efficacy, beliefs, impulse control, sensation seeking, religion**

**Sexual risk behavior involves two people, i.e., dyads**

**Member A: attitudes, emotions, normative pressures, self efficacy, beliefs, impulse control, sensation seeking, religious background**

**Member B: attitudes, emotions, normative pressures, self efficacy, beliefs, impulse control, sensation seeking, religious background**

# **Nature of Sexual Risk Behavior: How Not to Build a Theory – Ignore Half the Determinants of Behavior**

**Implication: We need dyad-level analyses and models of dyadic influence and decision making to better inform intervention efforts.**

**Sexual behavior is unique in this regard relative to many other adolescent risk behaviors**

# **Prevalence of Sexual Risk Behavior**

## **Some National Estimates**

**Pregnancy rate: 84 per 1,000 females aged 15 to 19**

**Over 2,000 pregnancies per day**

**Birth rate: 40.5 per 1,000 females aged 15 to 19**

**Over 1,100 children born to 15 to 19 year old female per day**

**Percent of 14-19 years old with Chlamydia: 3.4%**

**Percent of 14-19 years old females with HPV: 24.5%**

## **Some National Estimates**

**Percent high school youth who have had vaginal sex: 46.8%**

**Percent high school youth had >3 sex partners: 14.9%**

**Percent 15-19 years old youth had oral sex: 54.8%**

**Percent 15-19 years old youth had anal sex: 11.0%**

## **Some National Estimates**

**Sexually active high school youth who used condom at last intercourse: 61.5%**

**\*Percent experiencing an error/problem when using: 30%**

**Sexually active high school youth who used pill at last intercourse: 16.5%**

**\*Percent missing at least one pill in last cycle: 25%**

**Use effectiveness rate of condom: 85%**

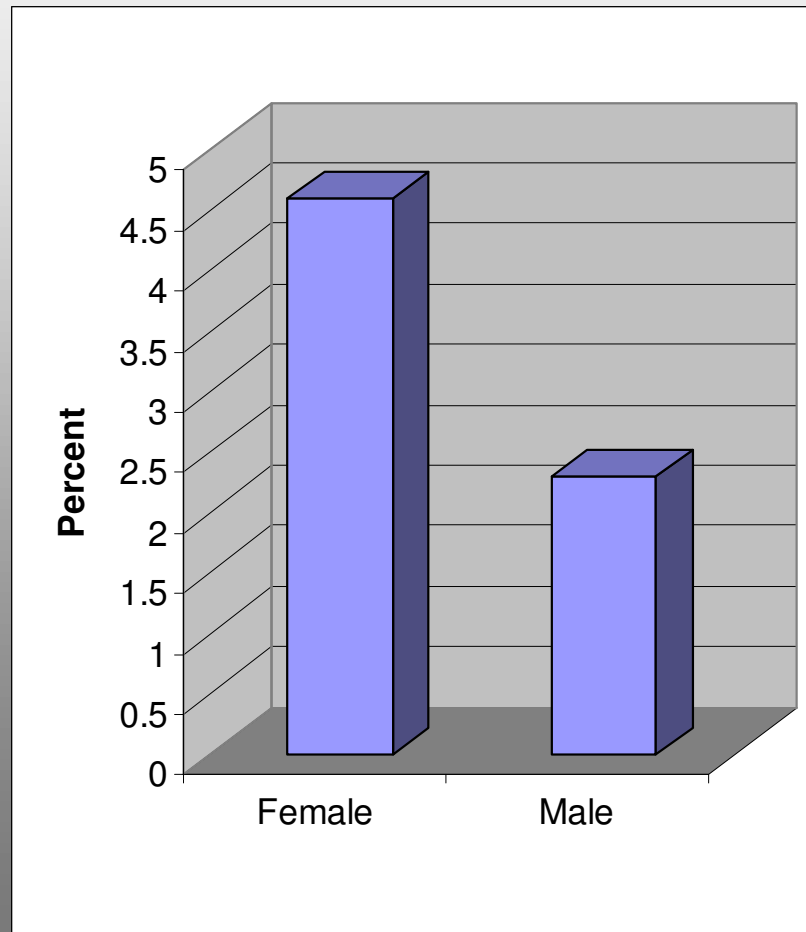
**Use effectiveness rate of pill: 92%**

# **Demographic Differences in Sexual Risk Behavior**

**(Complex because of confounds and varies by behavior)**

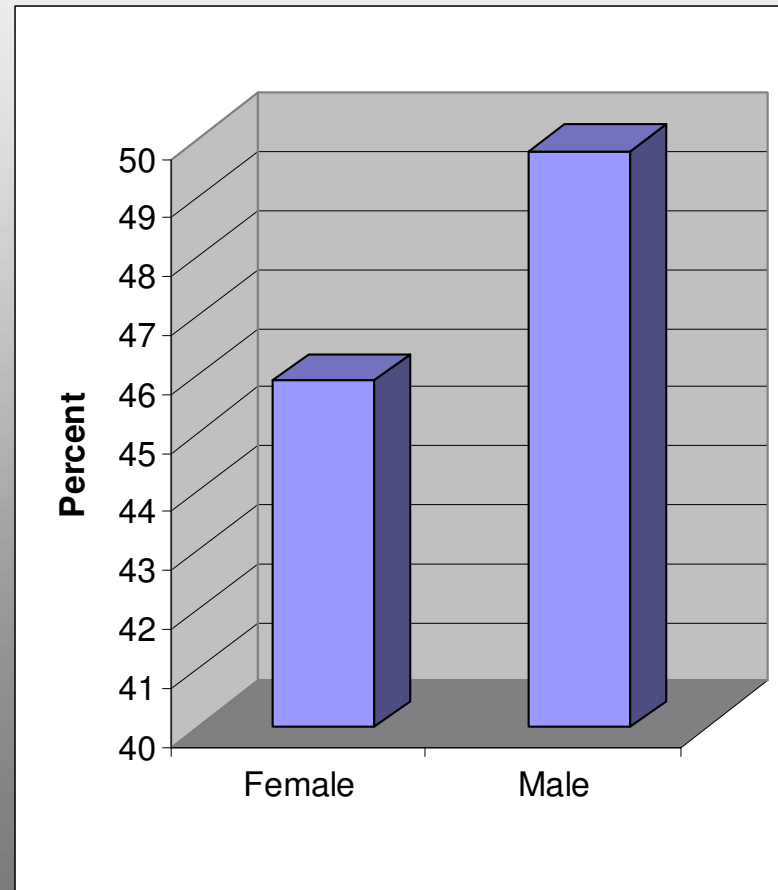
# Example Gender Differences

## Percent 14-19 years old with Chlamydia



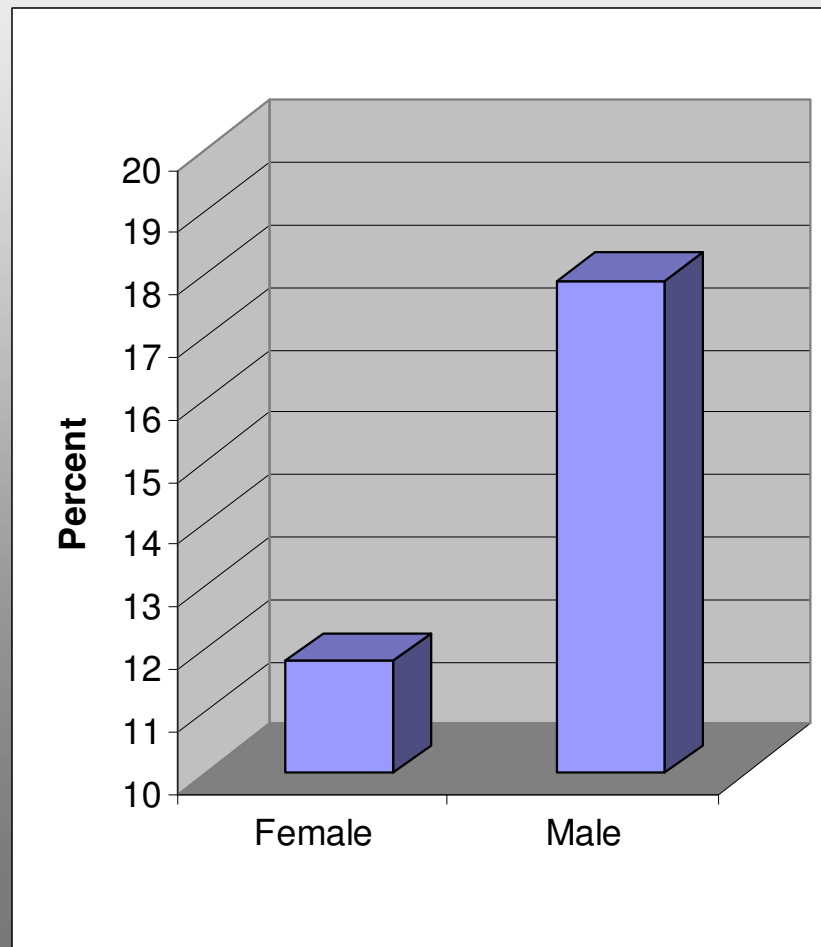
# Example Gender Differences

**Percent high school youth had vaginal sex**



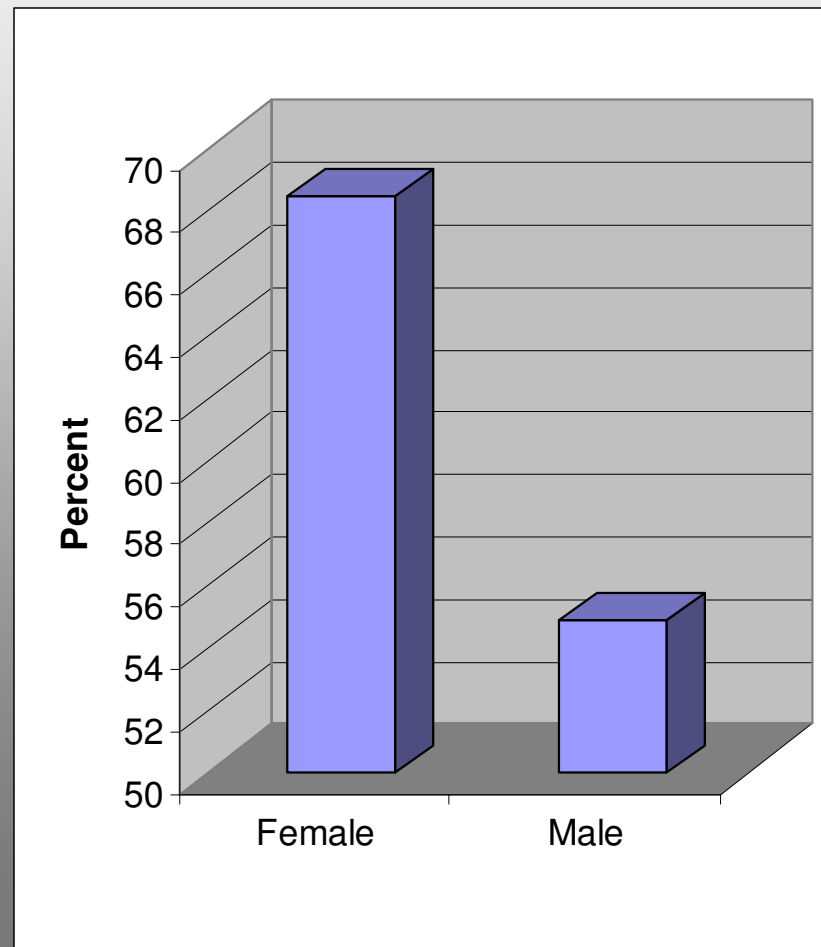
# Example Gender Differences

**Percent high school youth with more than 3 sexual partners**



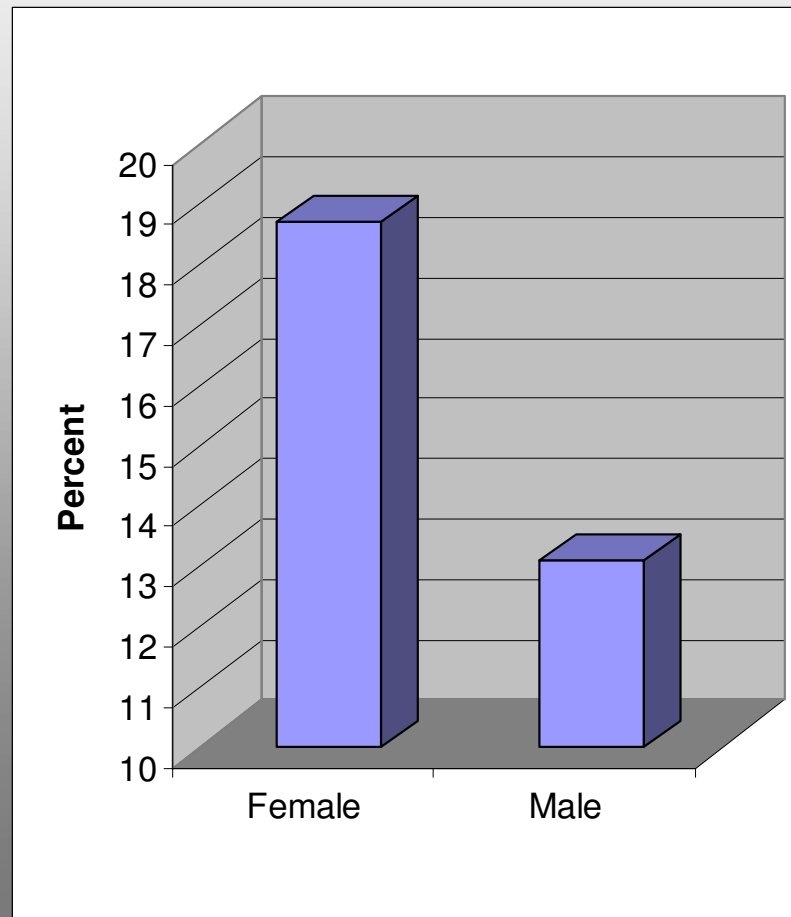
# Example Gender Differences

**Percent sexually active high school youth who used (or partner used) condom at last intercourse**



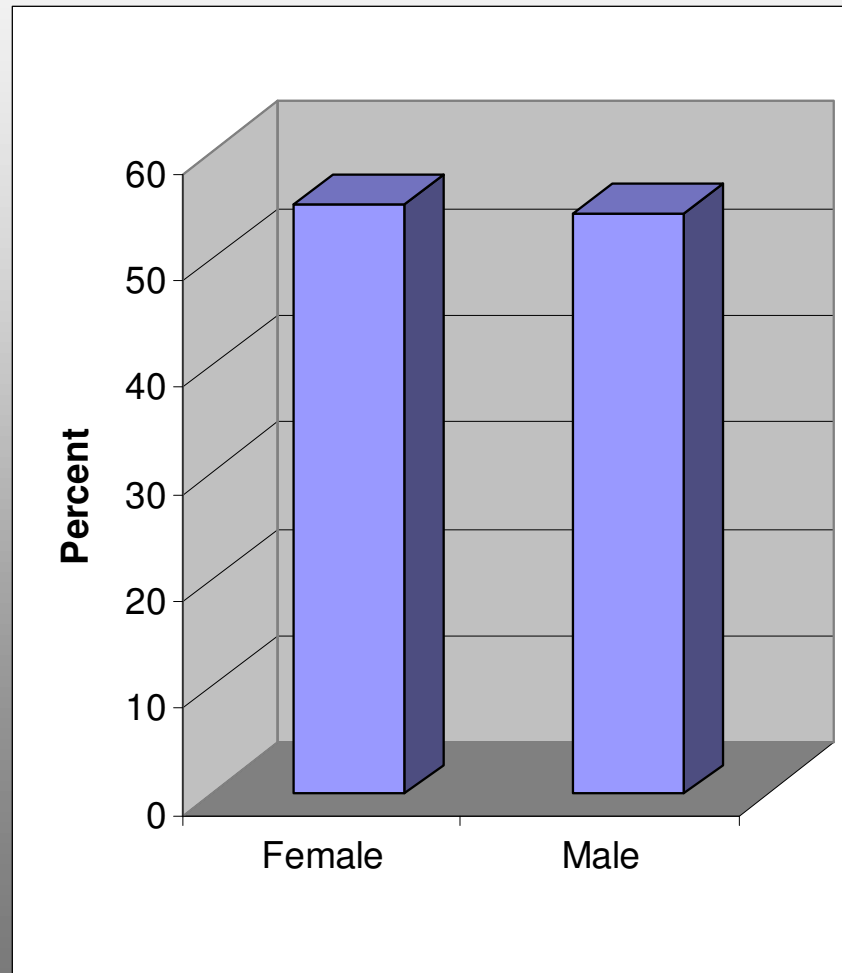
# Example Gender Differences

**Percent sexually active high school youth who used (or partner used) pill at last intercourse**



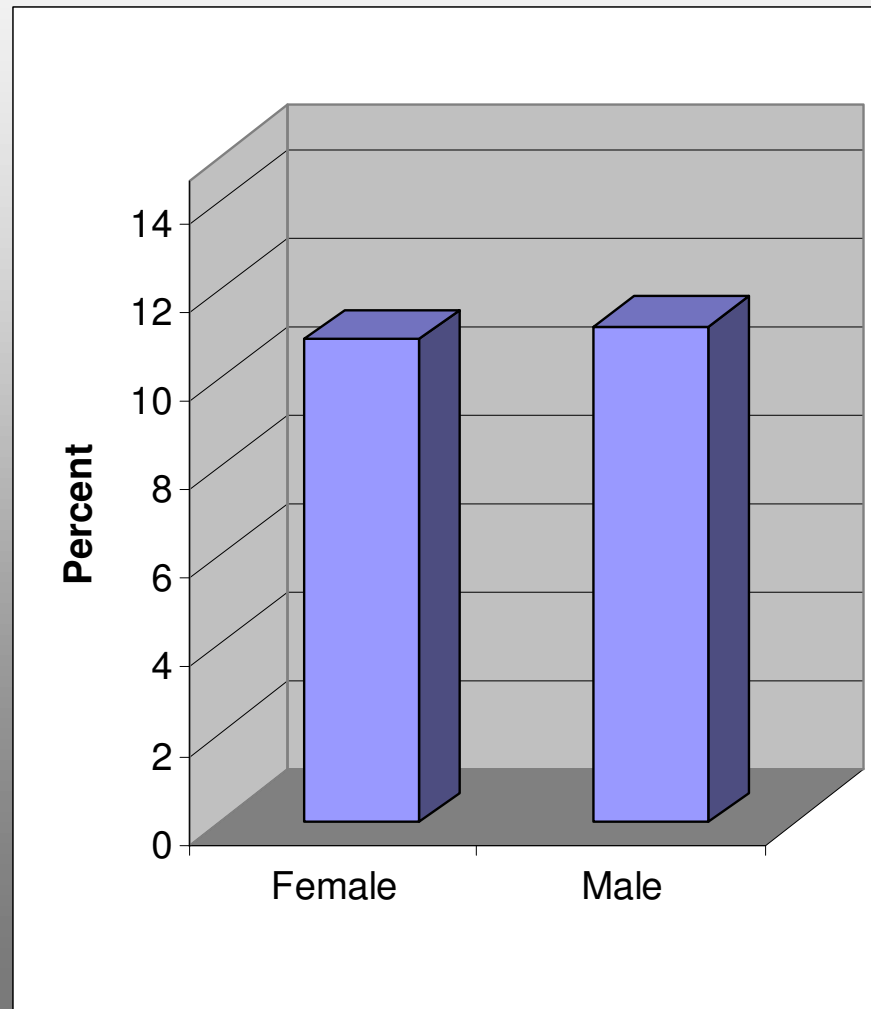
# Example Gender Differences

Percent 15-19 years olds ever engaged in oral sex



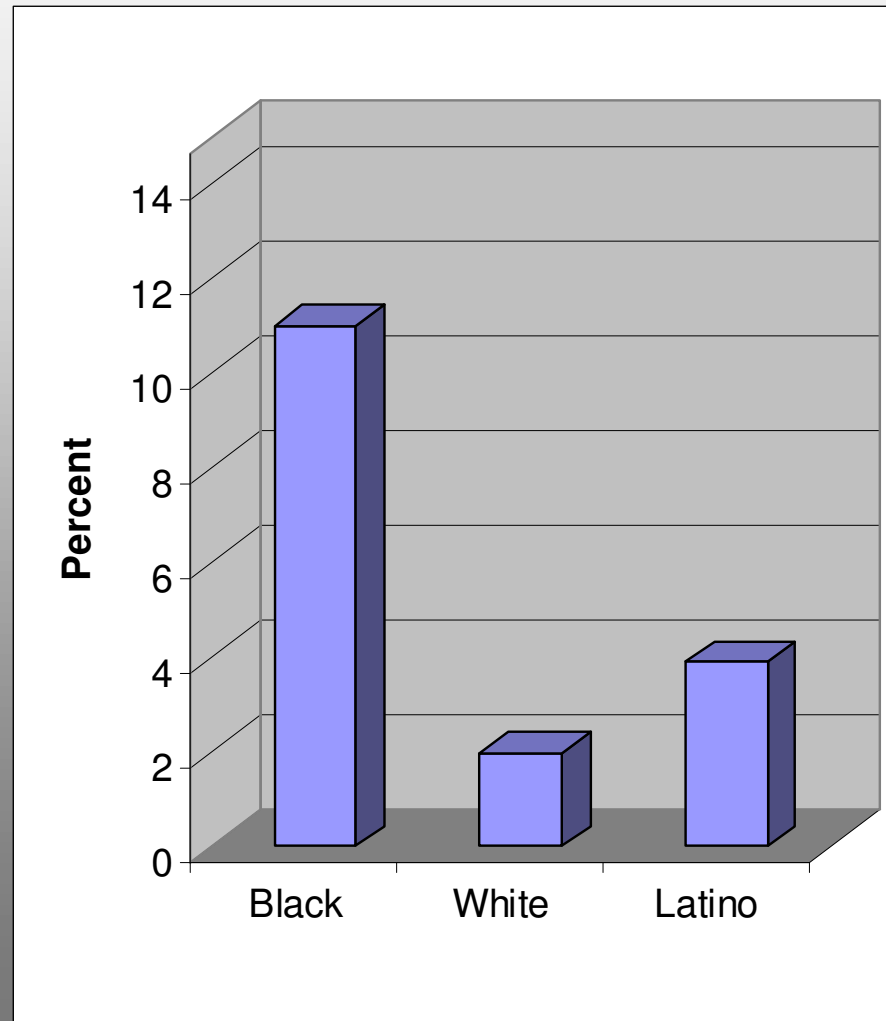
# Example Gender Differences

Percent 15-19 years old ever had anal sex



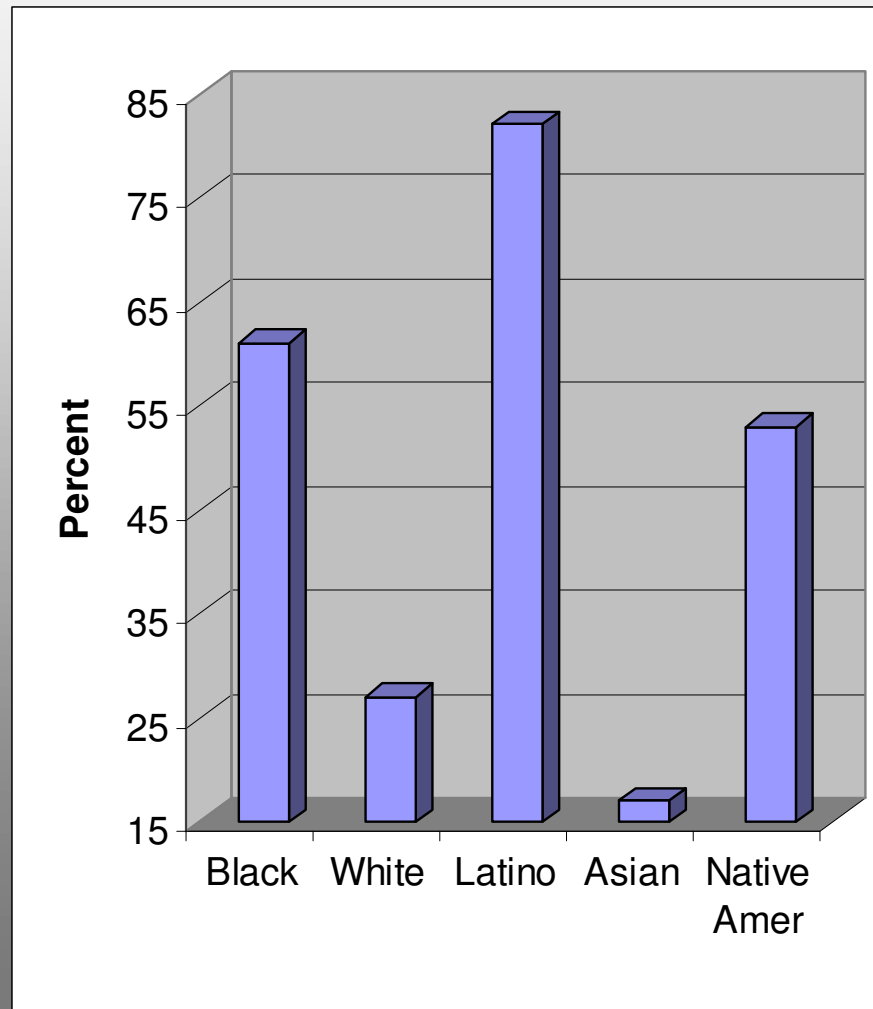
# Example Ethnic Differences

## Percent 15-19 years olds with Chlamydia



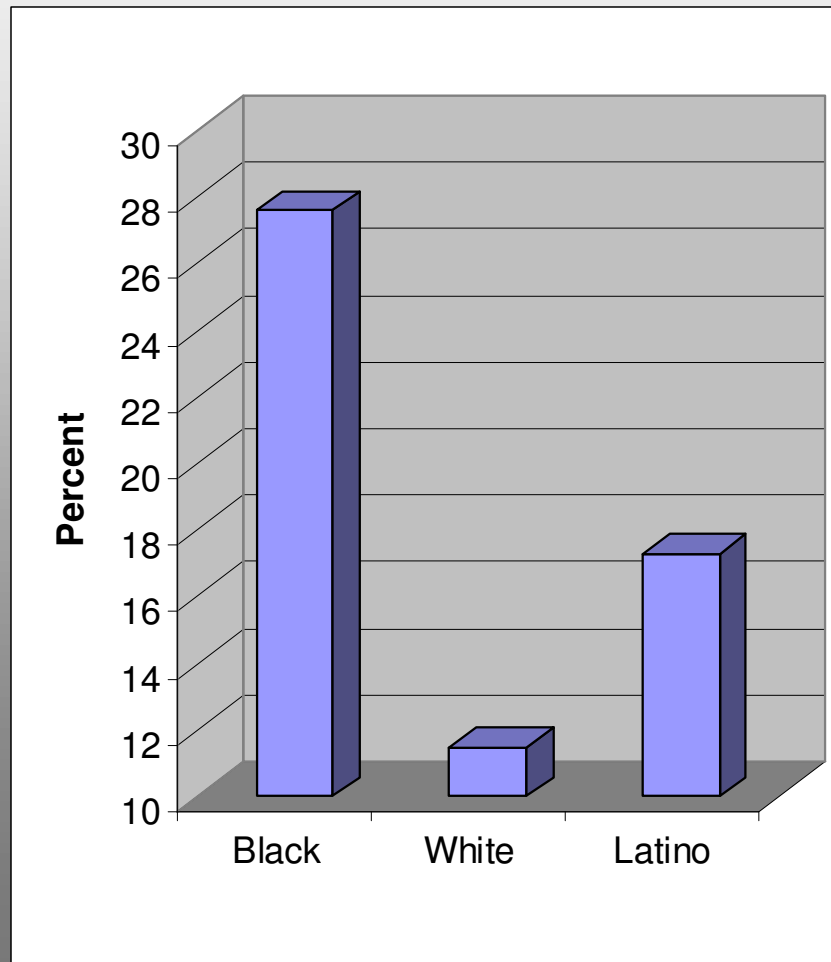
# Example Ethnic Differences

**Birth rate for females aged 14 to 19: Number per 1000**



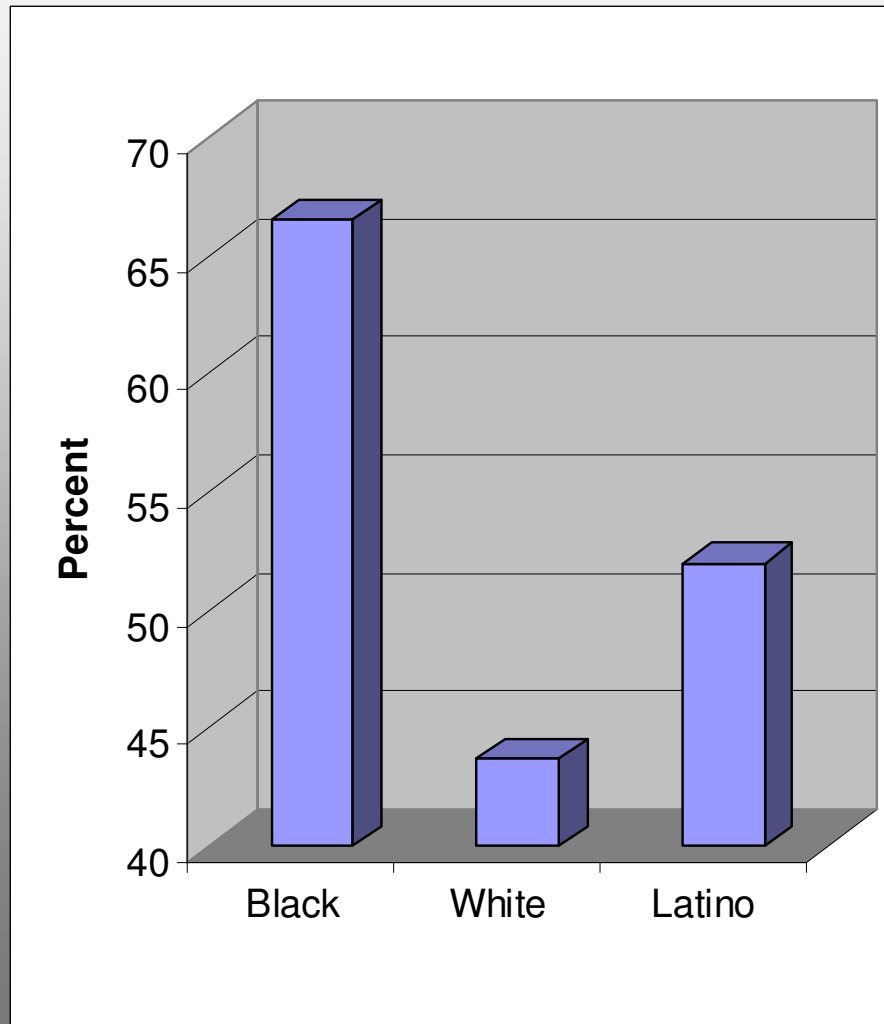
# Example Ethnic Differences

Percent high school students who have more than 3 sex partners



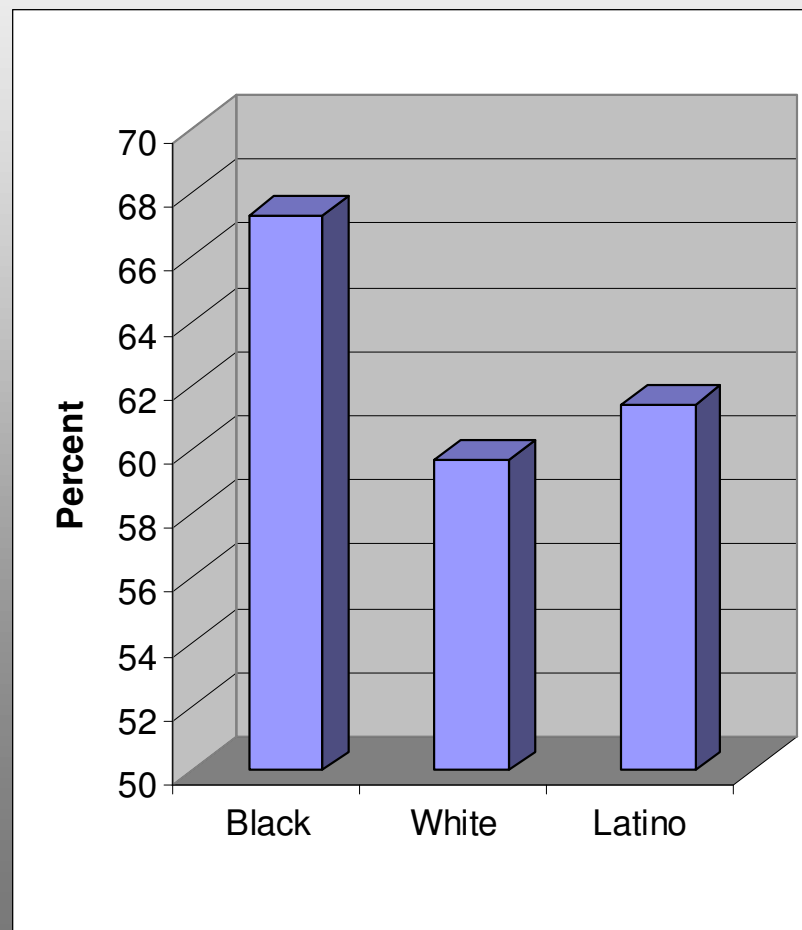
# Example Ethnic Differences

Percent high school students ever had sex



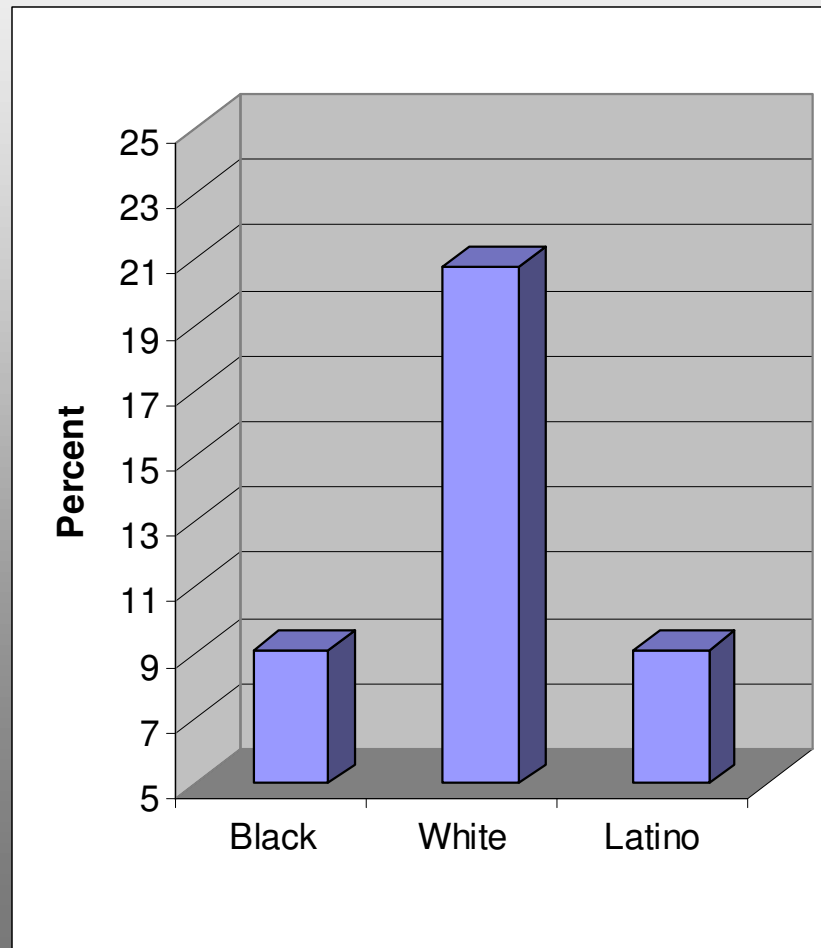
# Example Ethnic Differences

**Percent sexually active high school students who used condom at last intercourse**



# Example Ethnic Differences

**Percent sexually active high school students who used pill at last intercourse**

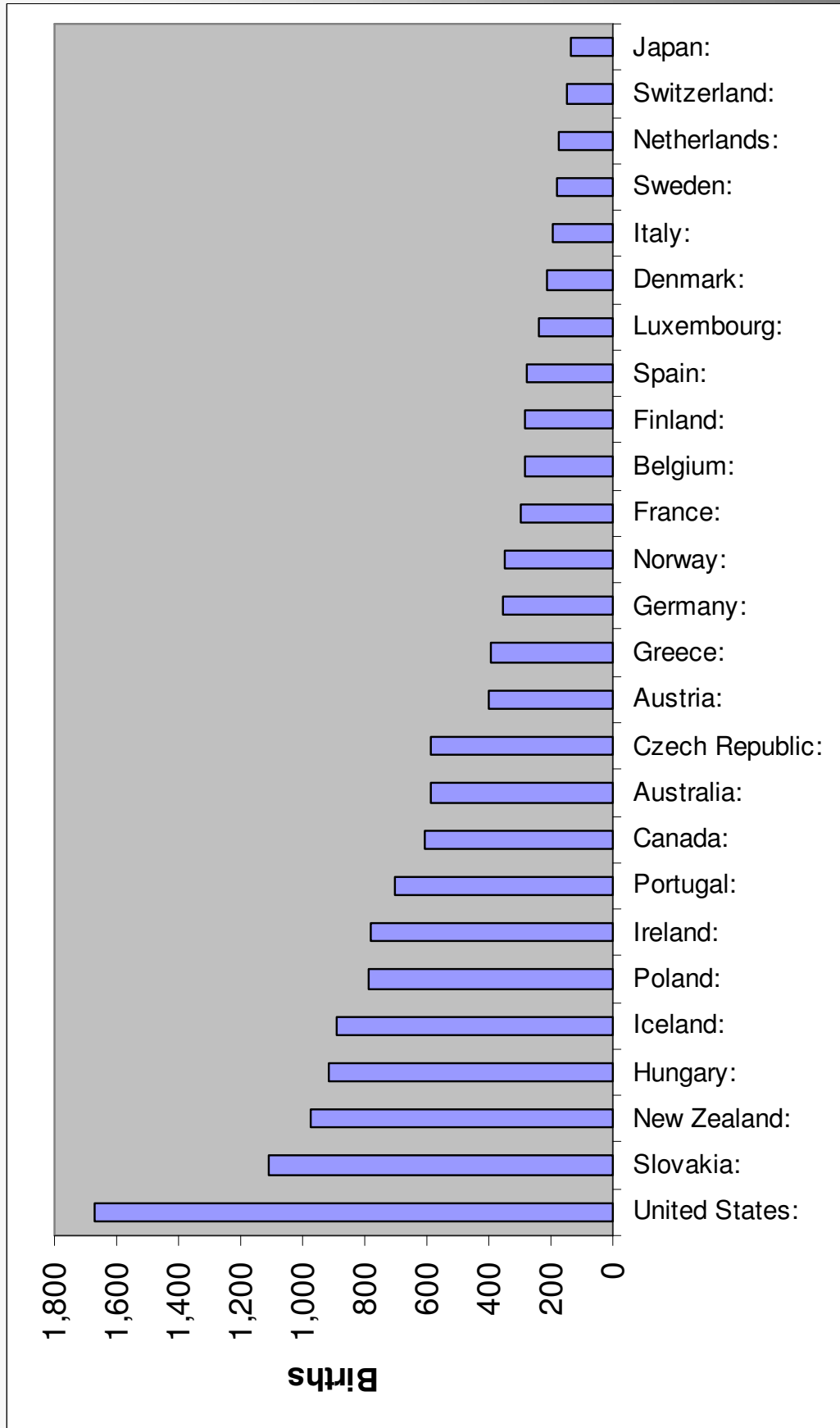




## Country Differences

Country	Ages 15-19		
	Births per 1000	Abortions per 1000	Pregnancies per 1000
Sweden (1996)	7.8	17.2	25.0
France* (1995)	10.0	10.2	20.2
Canada (1995)	24.5	21.2	45.7
Great Britain† (1995)	28.3	18.4	46.7
United States (1996)	54.4	29.2	83.6

# Country Differences



Births per million people for youth under 20 years old

# **Demographic Variables Often Dictate Targeted Interventions**

**Traditional segmentation strategies use demographics**

**Segmentation strategies used by social marketers**

**Demographics: Age, ethnicity, gender, education, cohort**

**Geographics: States, regions, counties, cities, neighborhoods**

**Psychographics: Personality, values, lifestyles**

**Behavioral criteria: Knowledge, attitudes, practices**

# **Target and Tailored Strategies**

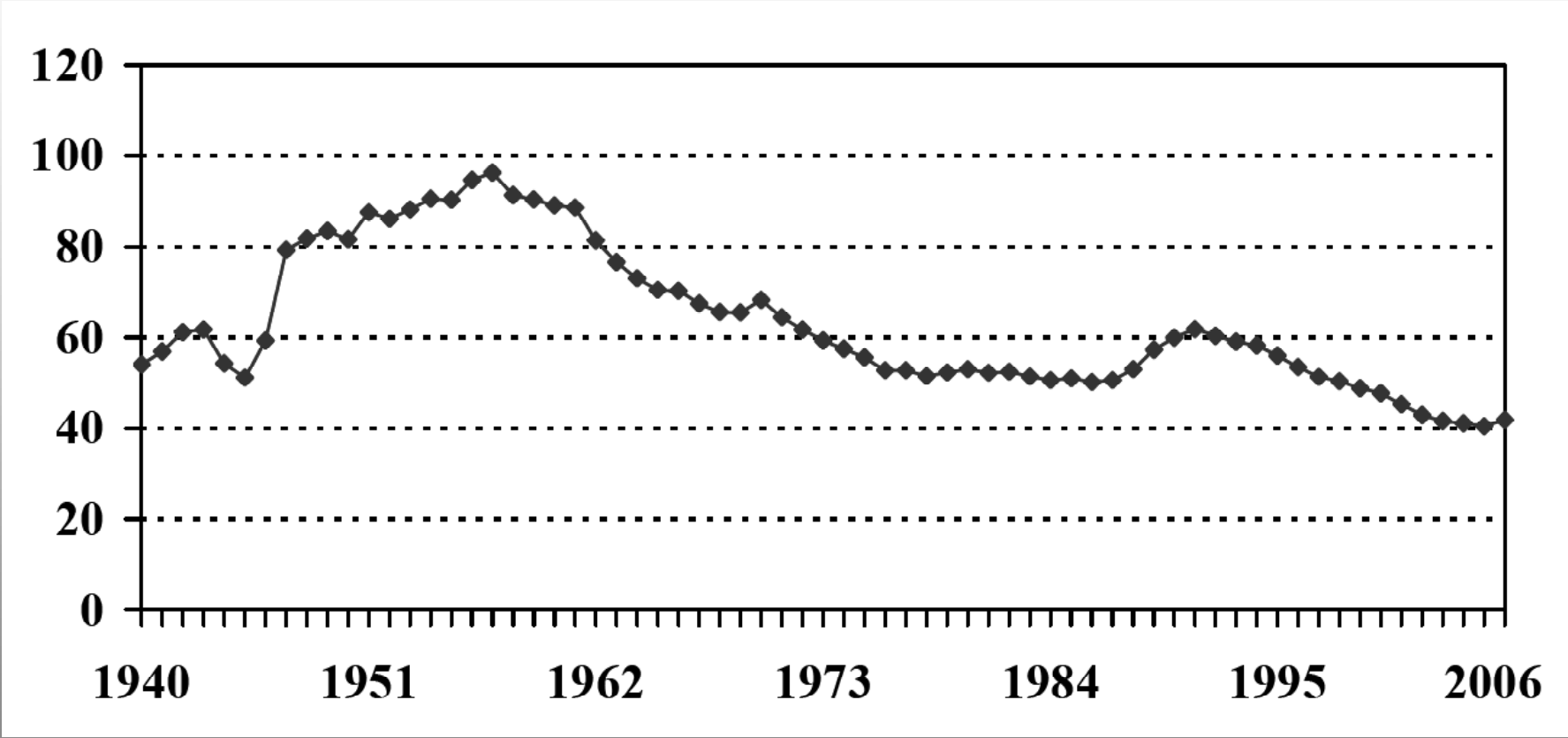
**Segment prioritization is based on:**

**Segment size, incidence rates, problem severity, defenselessness, reachability, responsiveness, incremental costs, organizational capabilities**

**Derive potential effectiveness score and efficiency score**

# **Historical Trends In Sexual Risk Behavior**

# Historical Trends in Adolescent Birth Rates



Number of births per 1,000 females aged 15-19

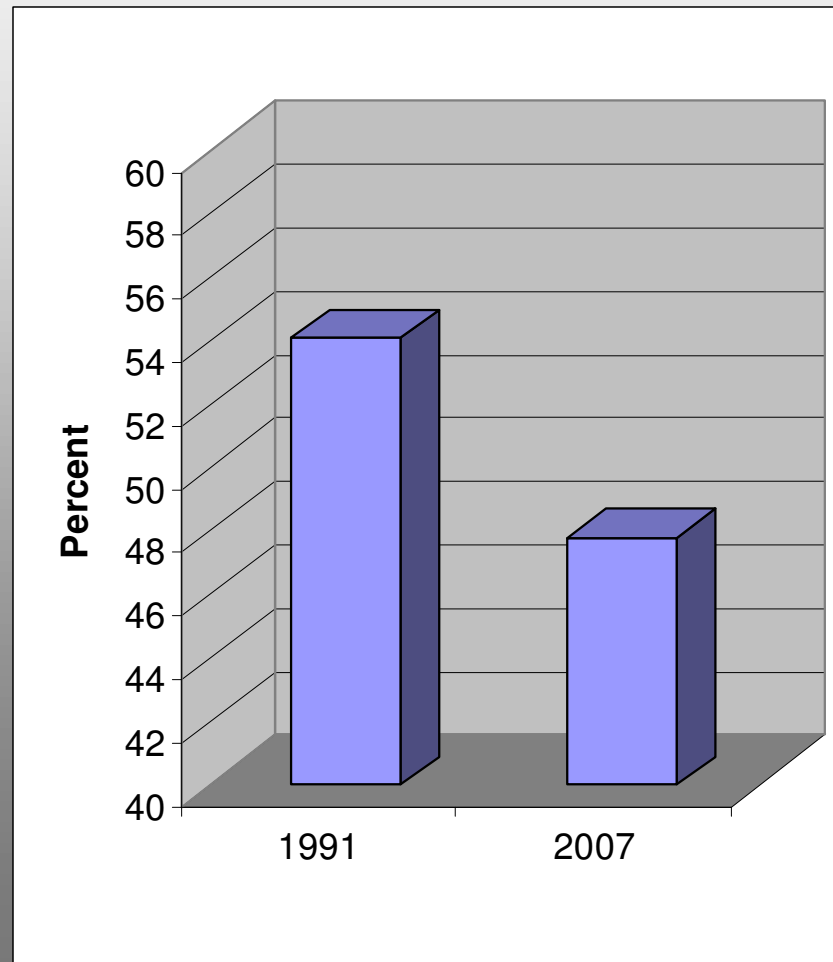
## **General Historical Trends**

**Compared to 1991, many sexual risk related behaviors as of 2007 have declined**

**However, rates of many sexual risk behaviors have been constant in past 3-5 years, and some show small bumps up**

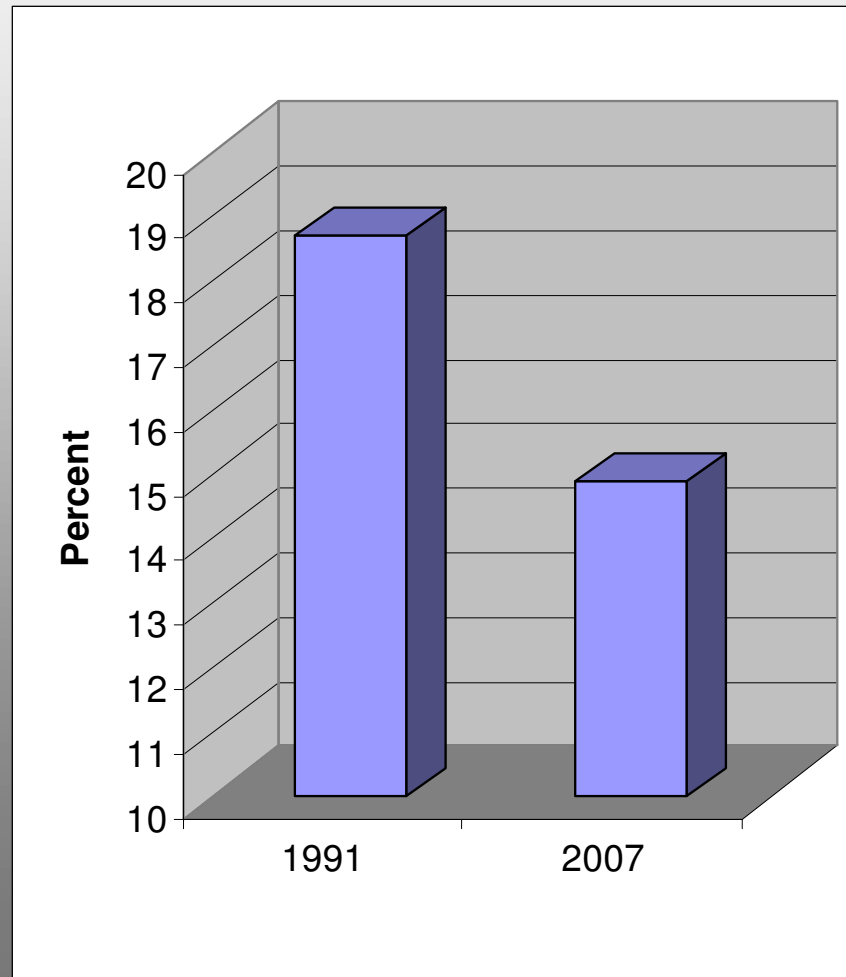
# General Historical Trends

## Percent high school youth who had vaginal sex



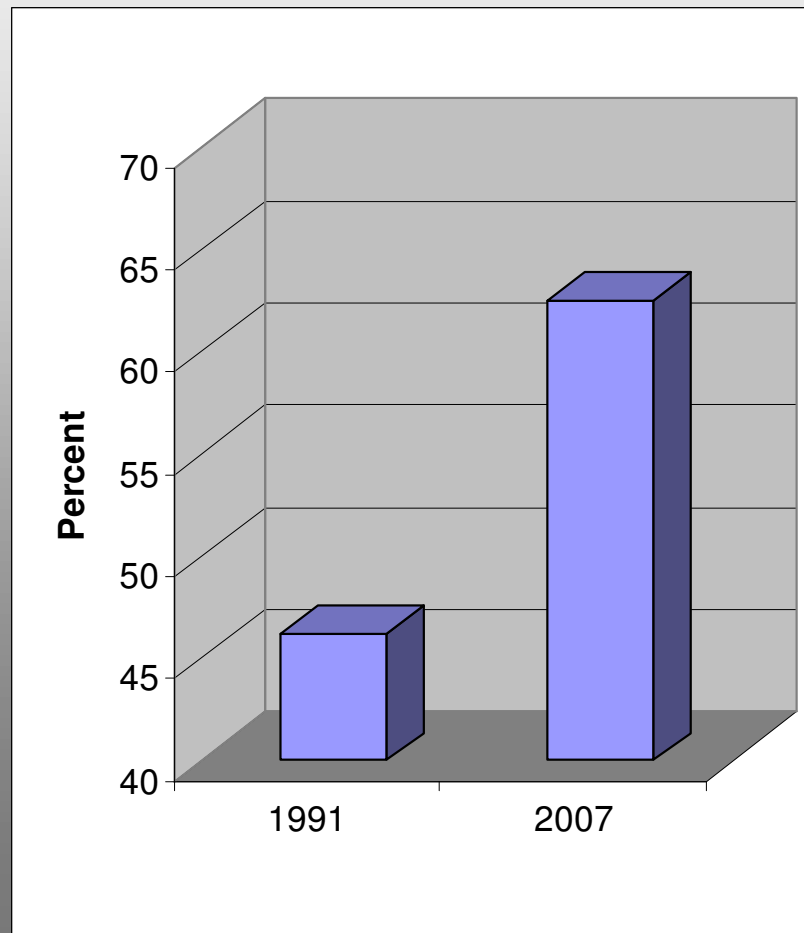
# General Historical Trends

**Percent high school youth with > 3 partners**



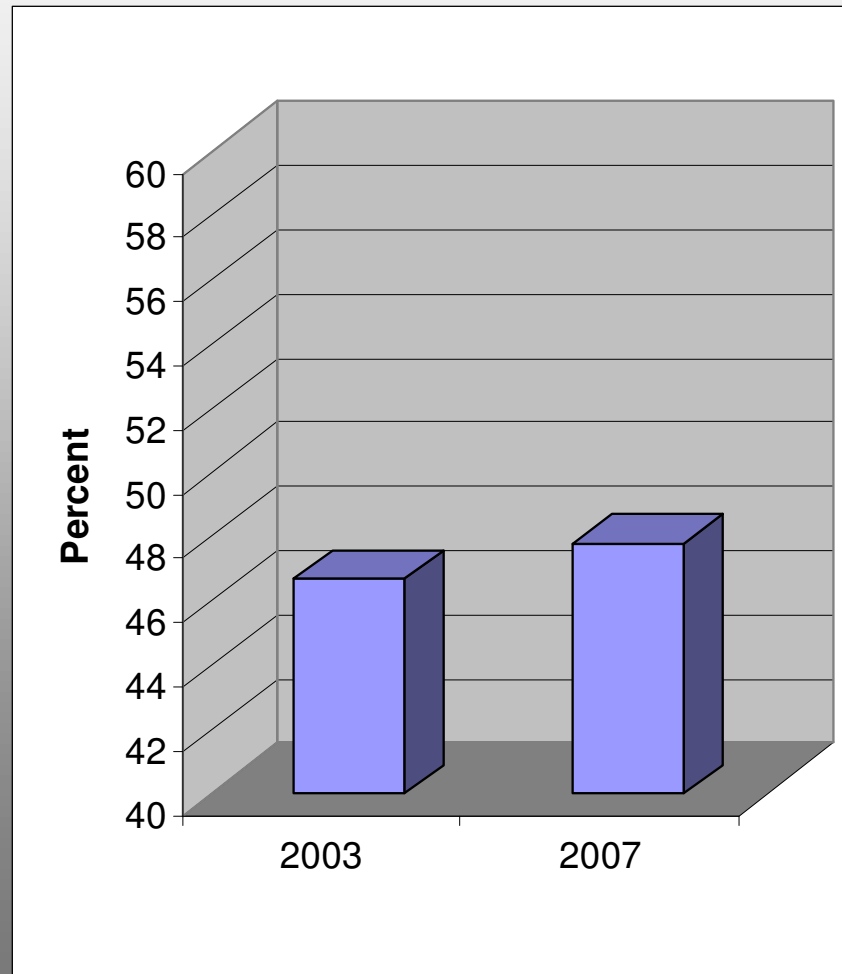
# General Historical Trends

**Percent sexually active high school youth who used condoms at last intercourse**



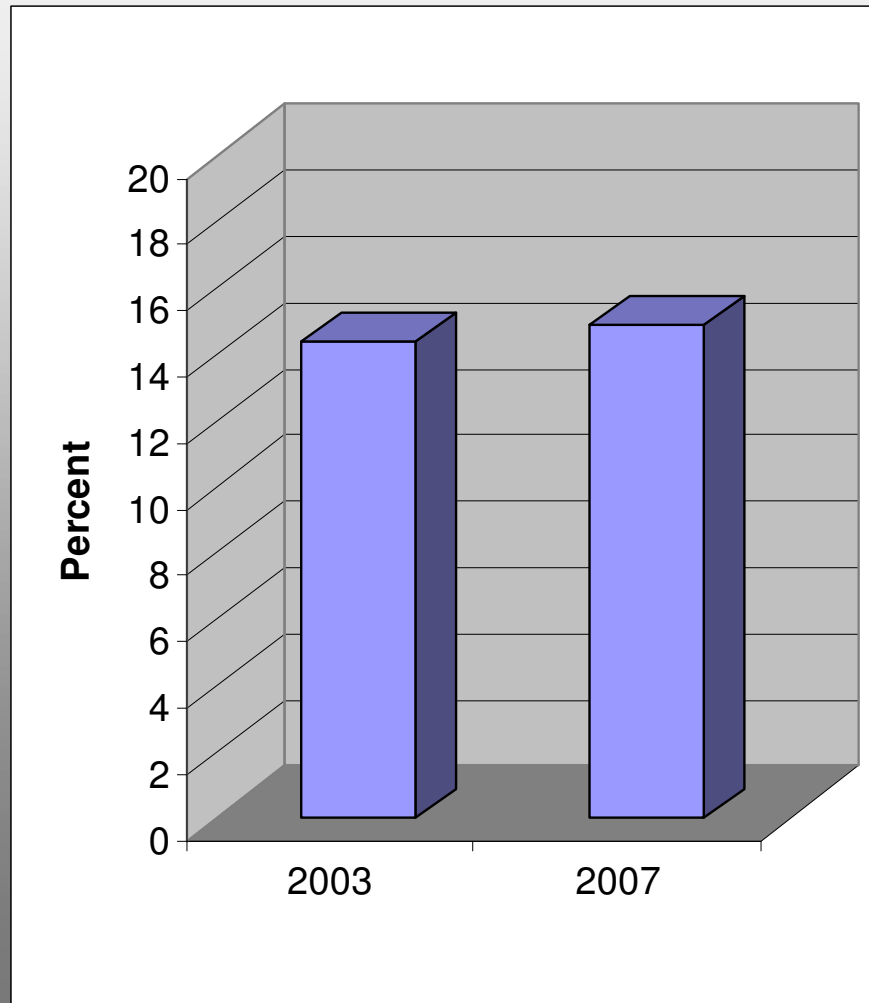
# General Historical Trends

## Percent high school youth who had vaginal sex



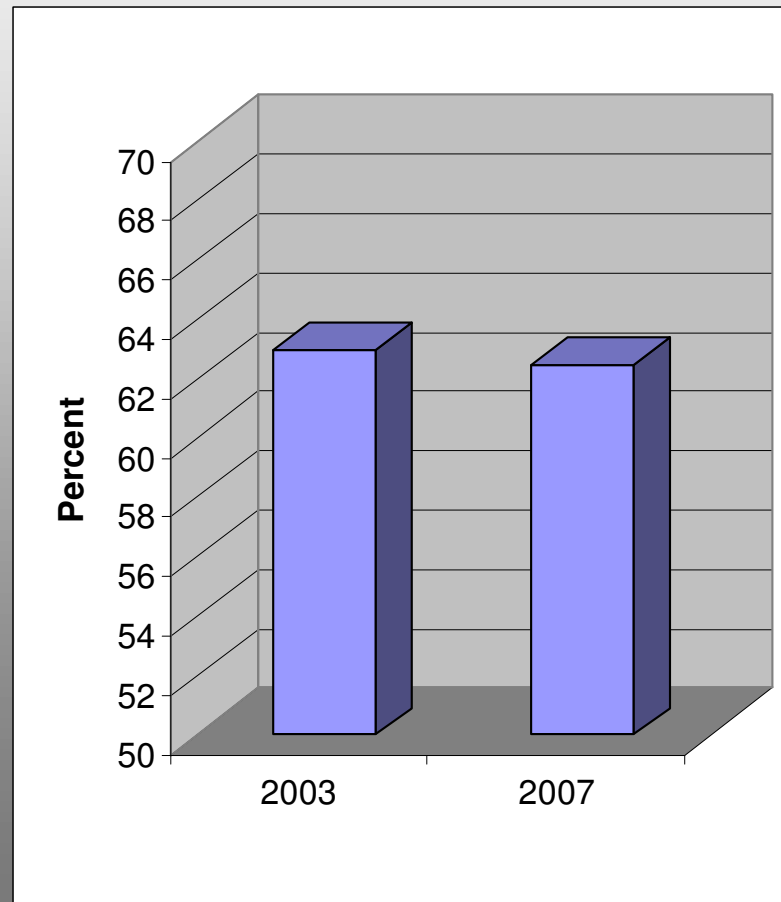
# General Historical Trends

**Percent high school youth with >3 sexual partners**



# General Historical Trends

**Percent sexually active high school youth who used condoms at last intercourse**



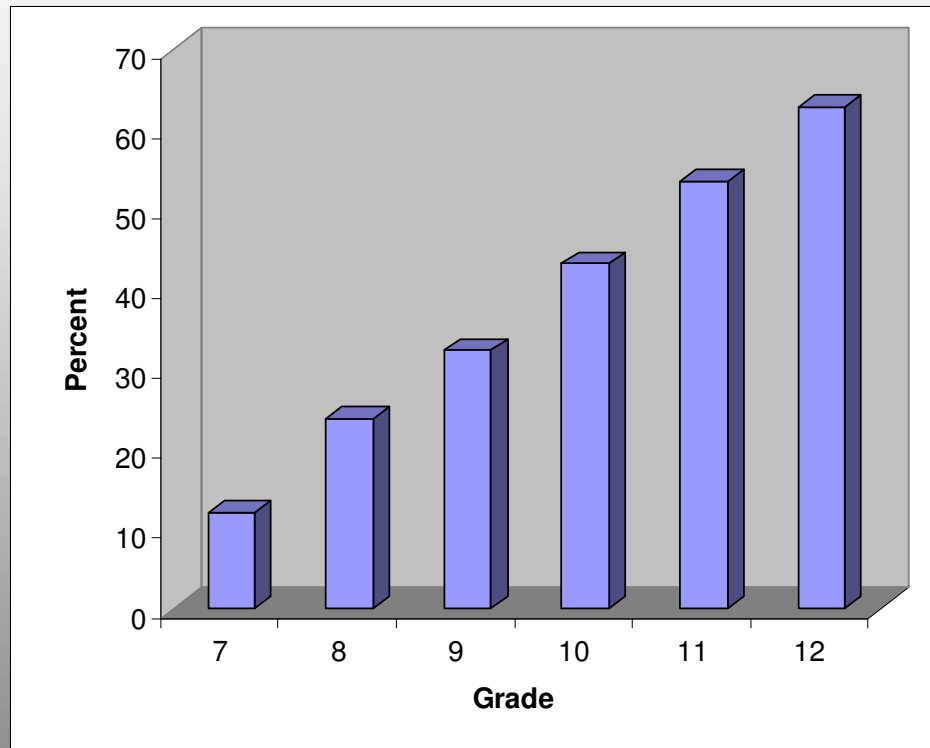
# **Implication**

**Why the leveling off? (Don't really know)**

**We need to not be complacent from the success of the 90s and re-double our current efforts**

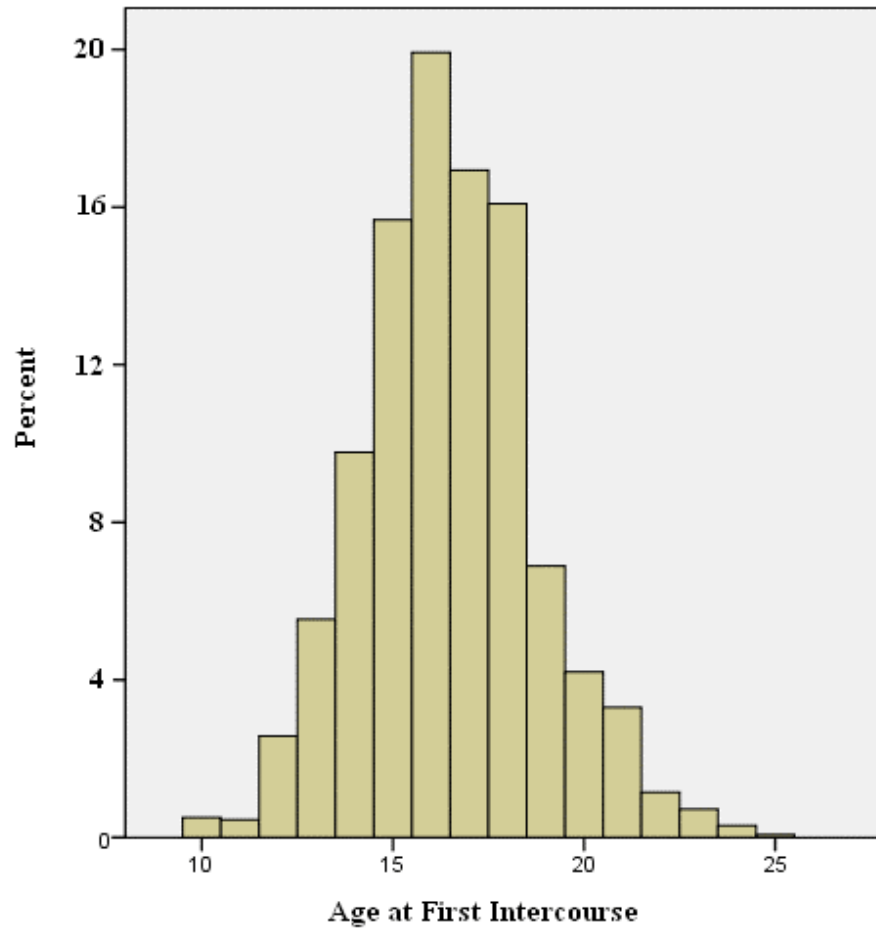
# **Developmental Course of Sexual Risk Behavior**

## Ever Had Sex as a Function of Grade

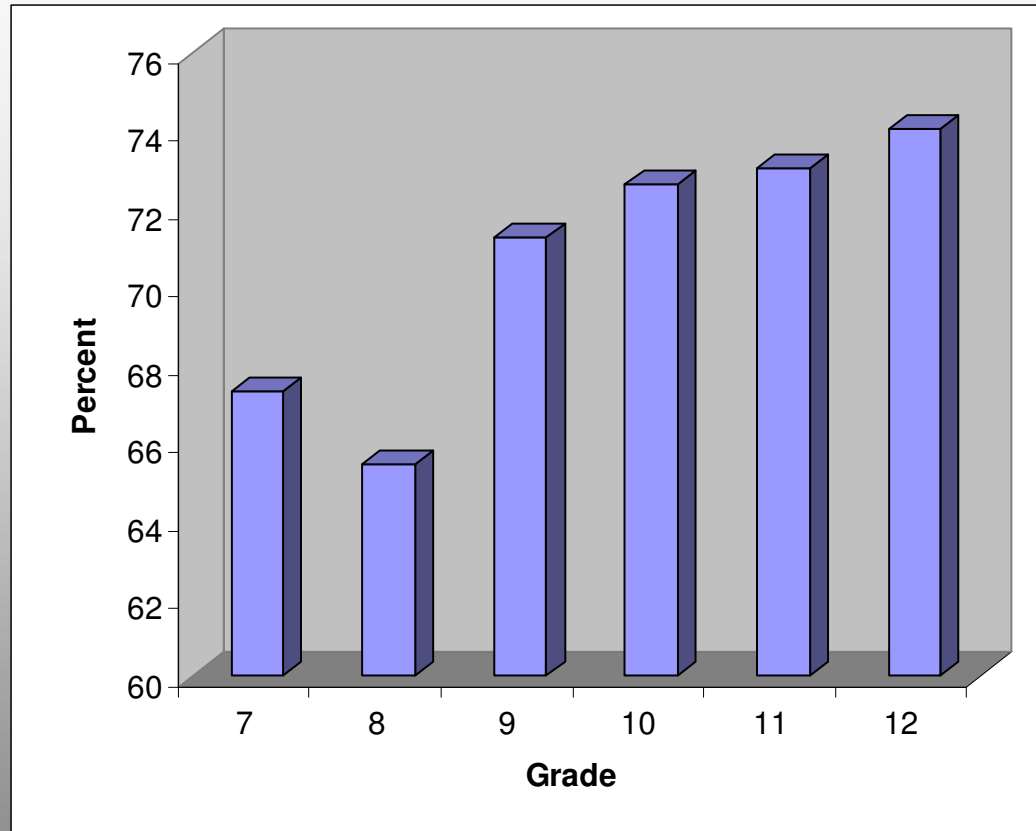


**Increases by an absolute value of about 10% each grade**

# Age at First Intercourse

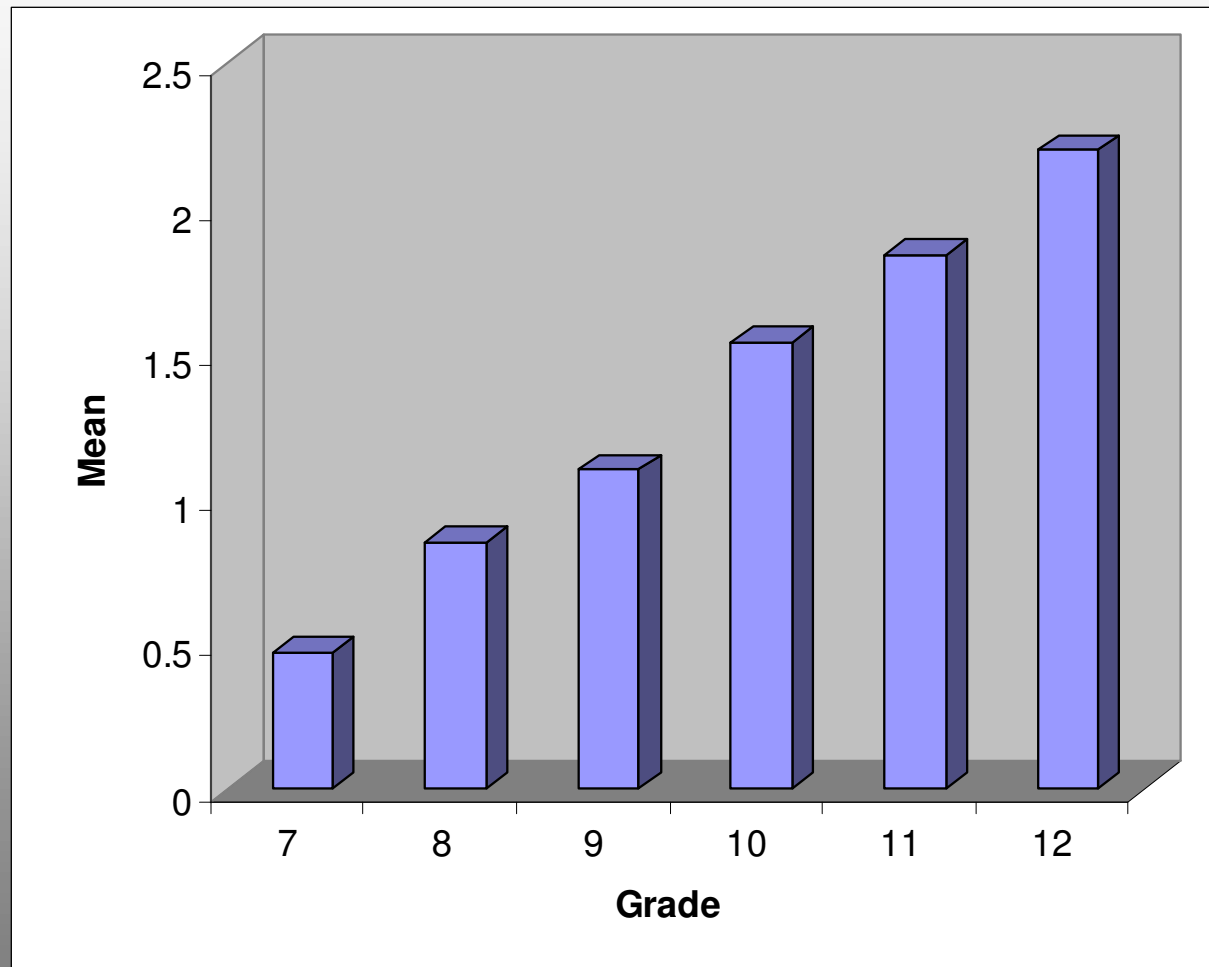


# Used Protection at Most Recent Intercourse

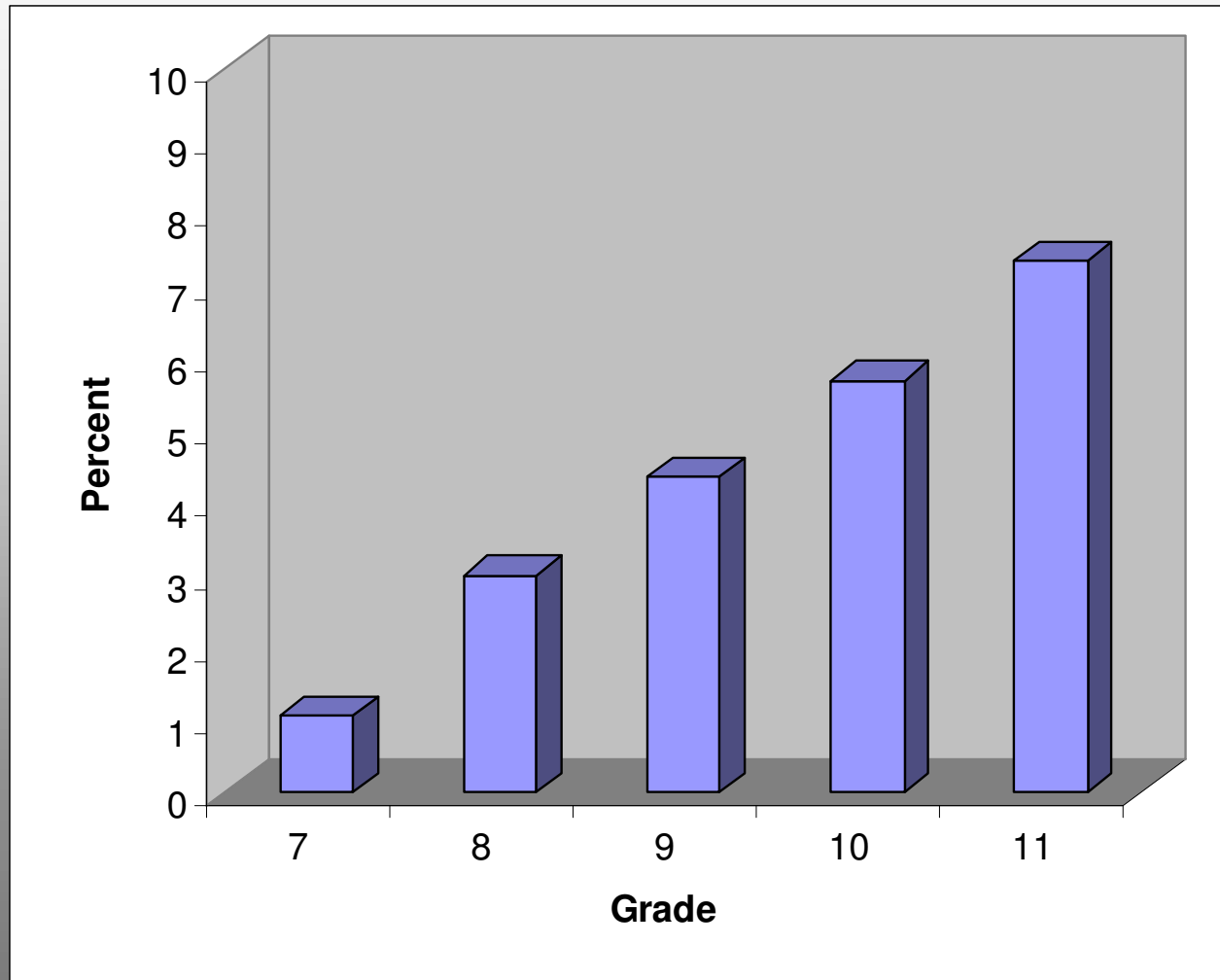


**Rates are lowest in middle school and comparable across grades in high school and around 73%**

# Number of Casual Partners Had Intercourse With

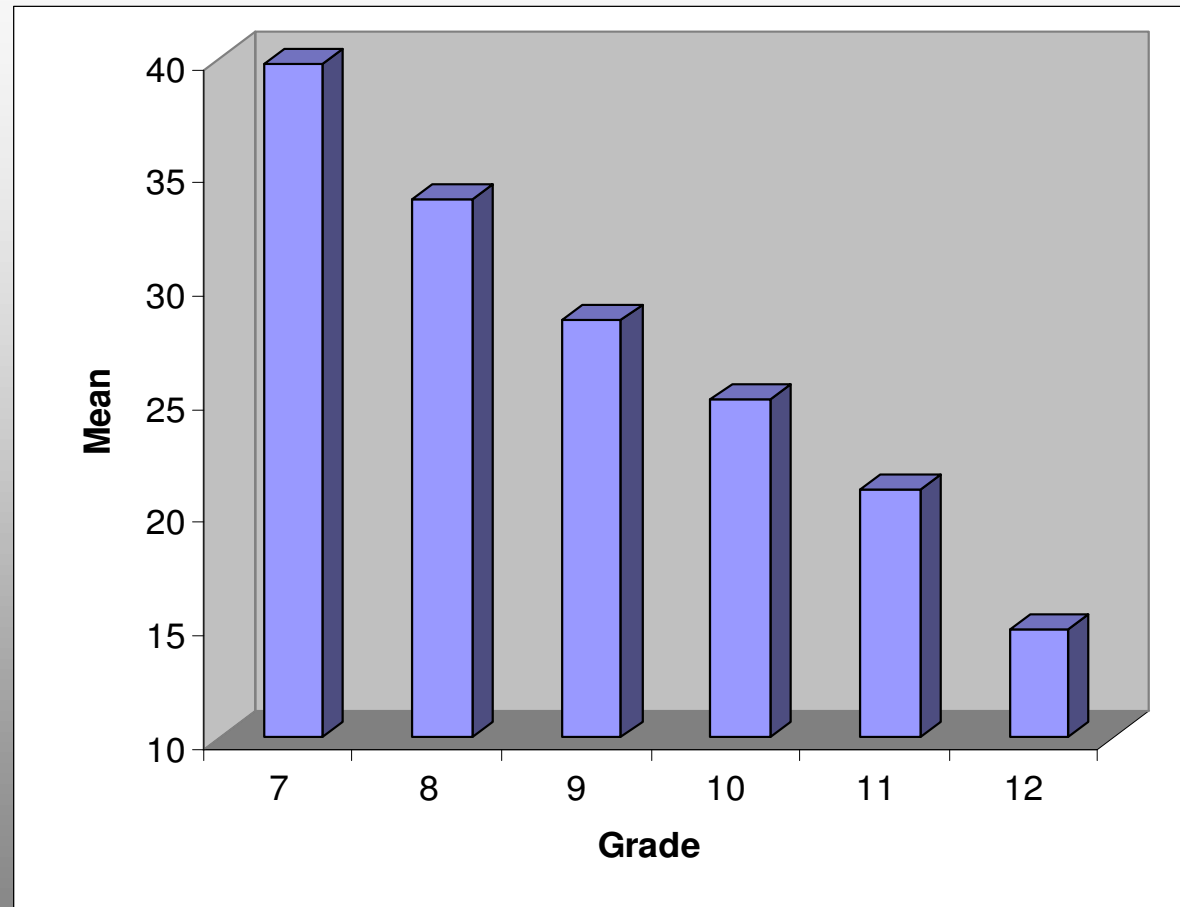


# Percent Females Became Pregnant in Next 12 Months



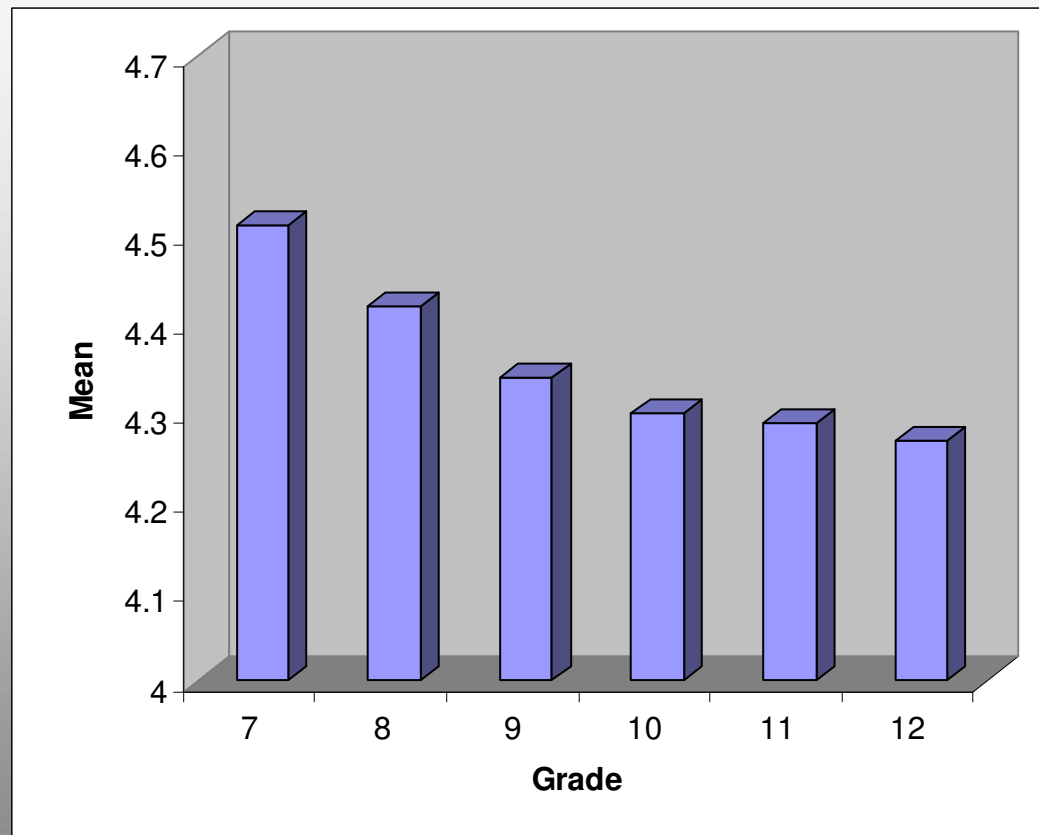
## **Some Developmental Changes in Contexts**

# Family Context: Parental Control



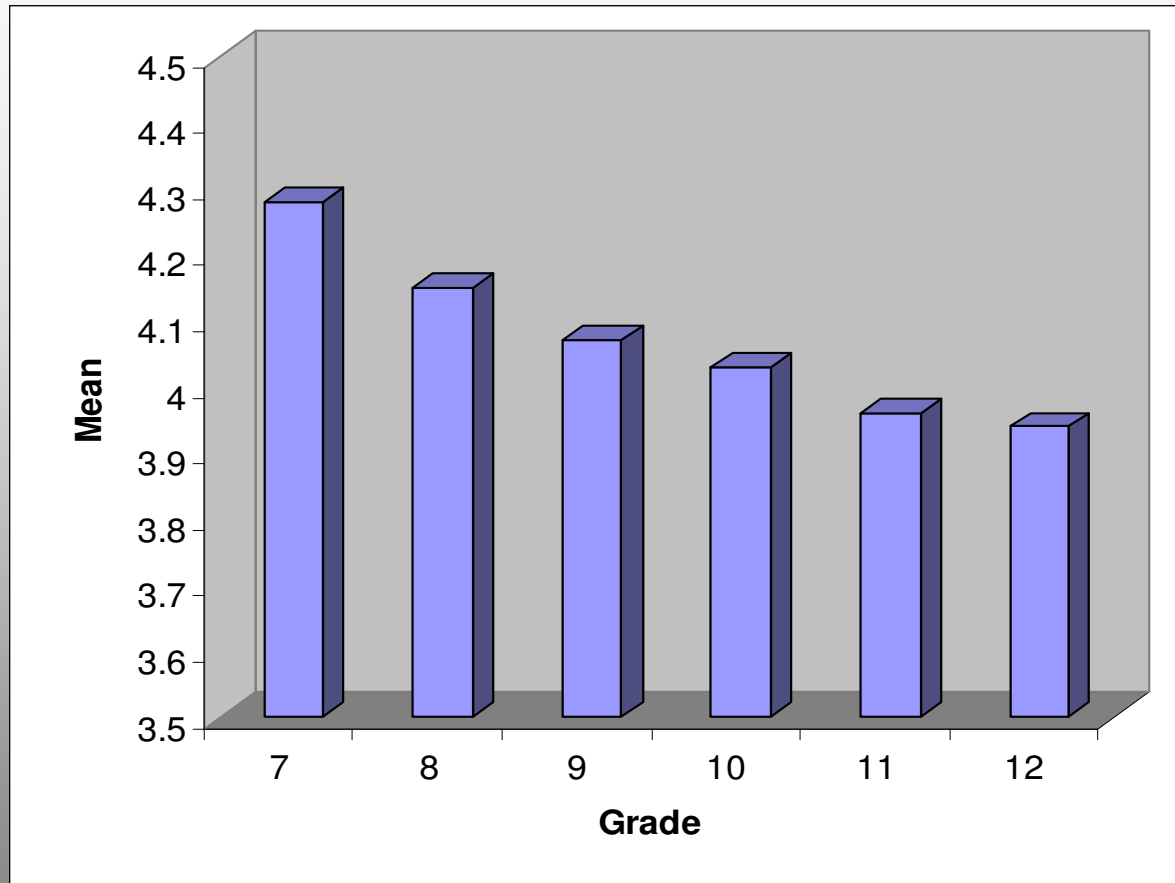
Percent of domains where parent does not let child make own decision

# Family Context: Parental Warmth



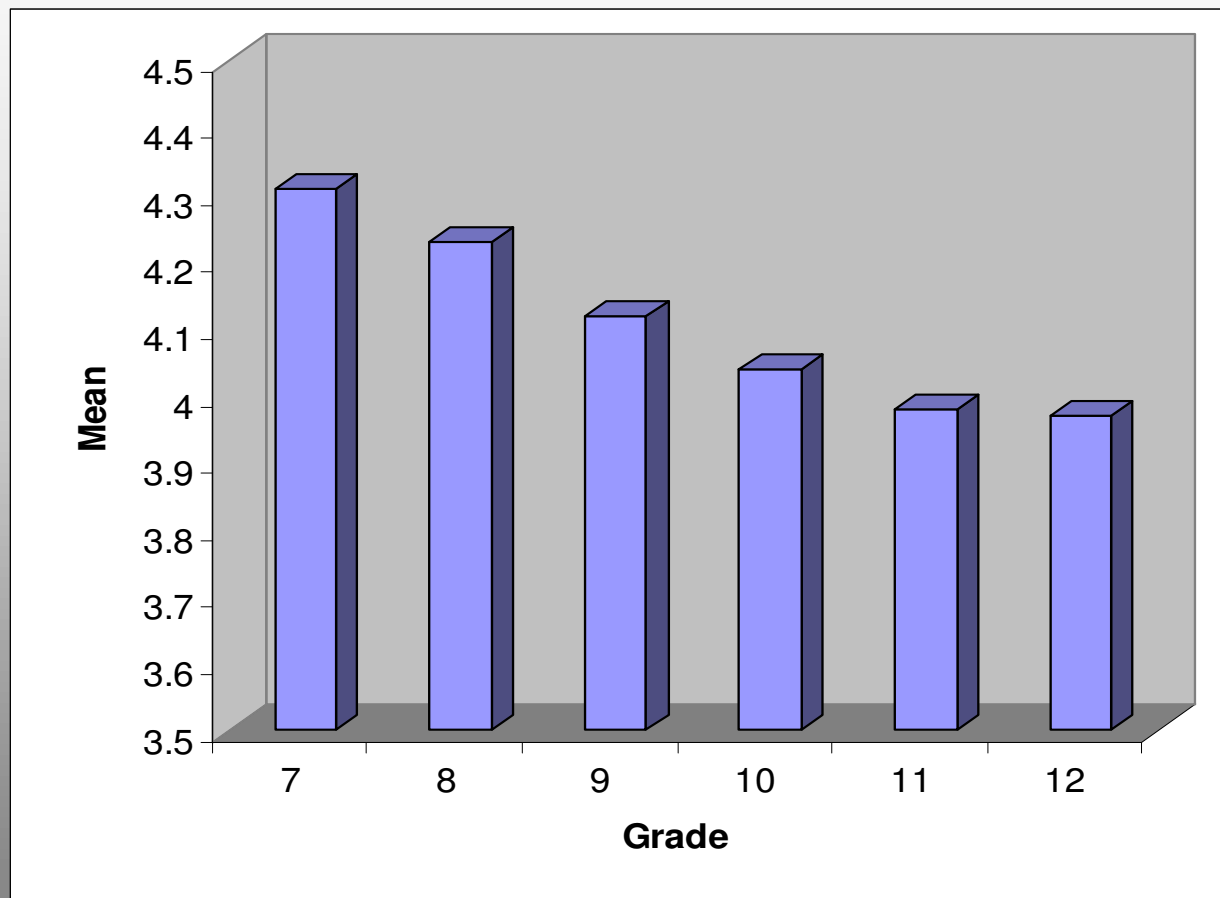
Mean of 5 items on 1 to 5 strongly disagree to strongly agree scale

# Family Context: Parental Monitoring



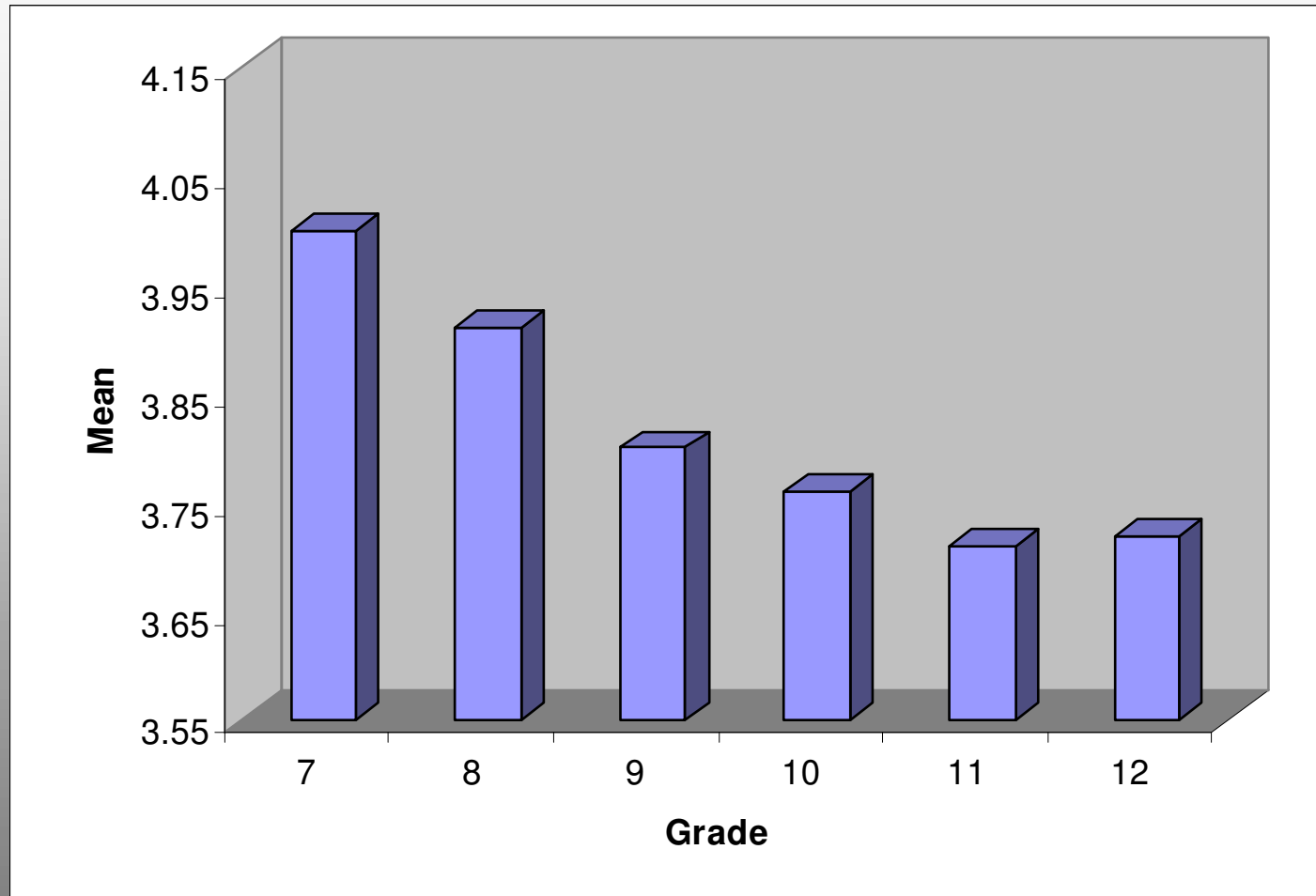
Mean of 3 items on 1 to 5 strongly disagree to strongly agree scale

# Parental Use of Reasoning When Disciplining



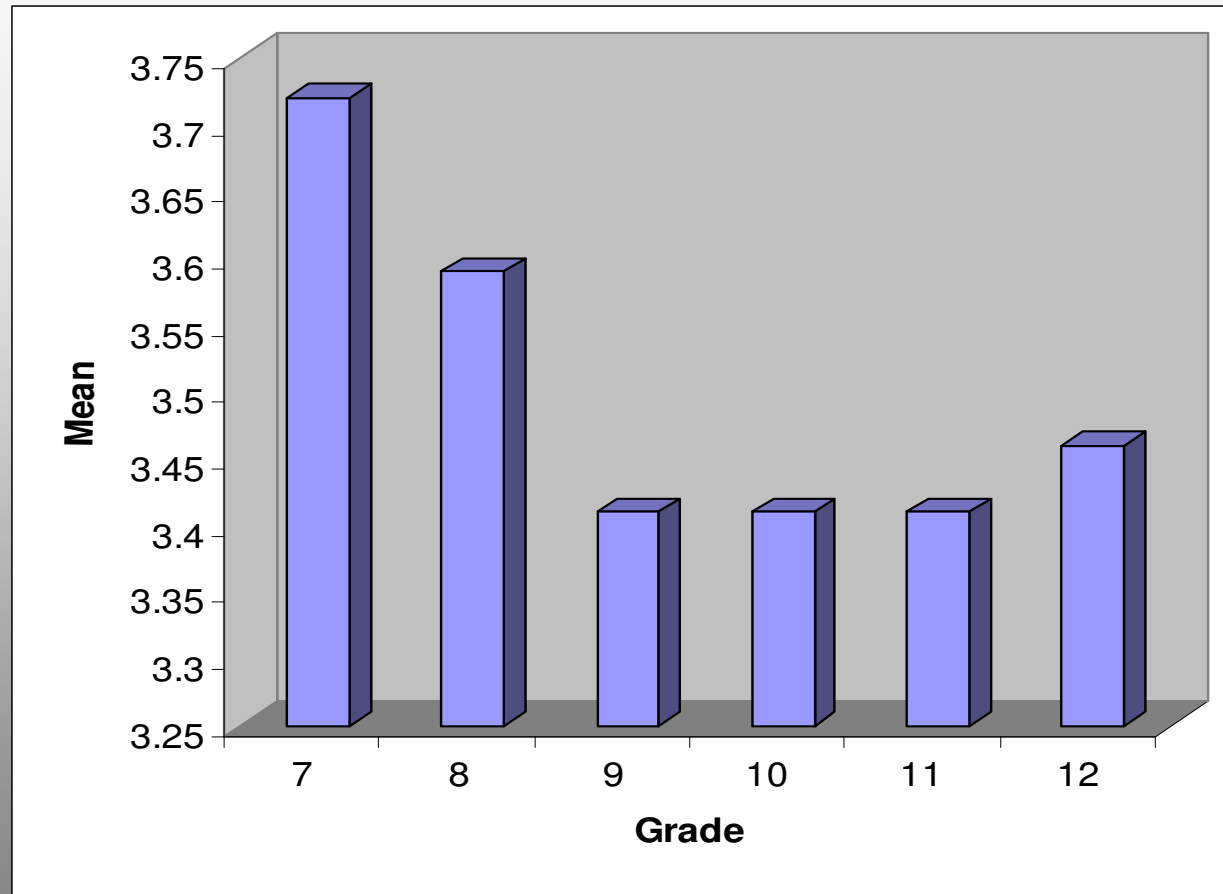
Item on 1 to 5 strongly disagree to strongly agree scale

# School Context: Feel Part of School



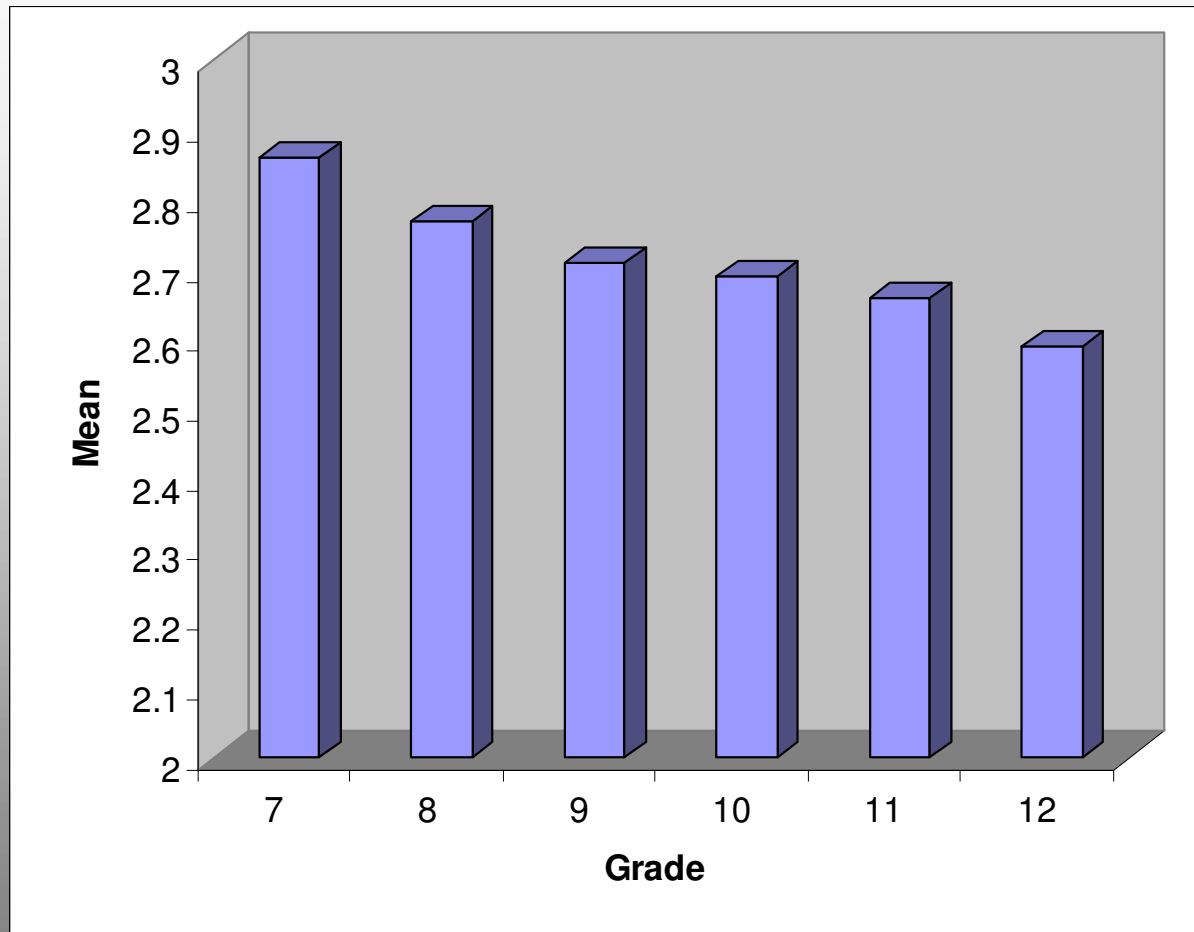
Item on 1 to 5 strongly disagree to strongly agree scale

## School Context: Teachers Care about Me



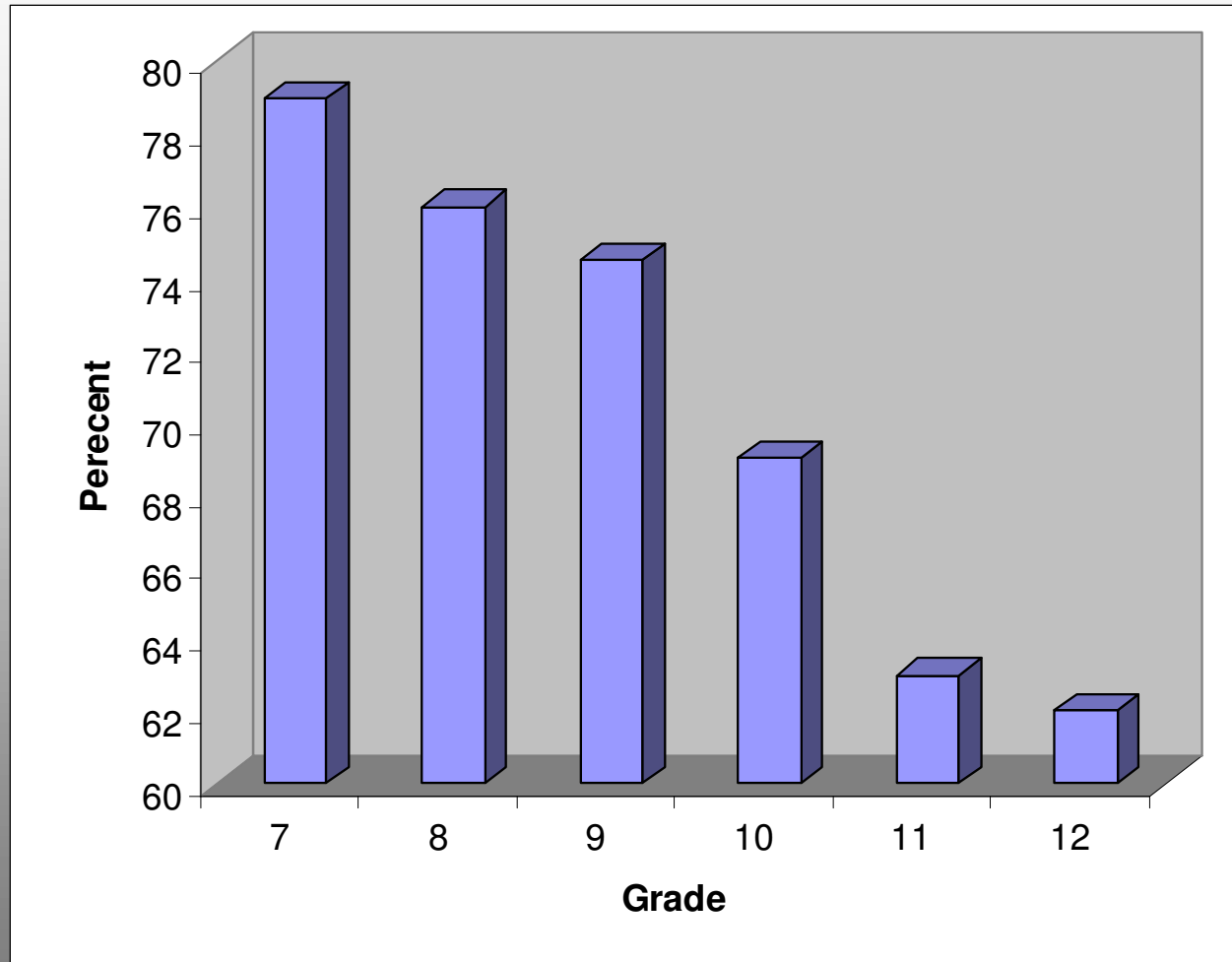
Item on 1 to 5 strongly disagree to strongly agree scale

# Religious Context: Church Attendance



Item on 1 to 4; never to once a week or more

# Neighborhood Context: Know Most People



**True-False Response**

# **Etiology of Sexual Risk Behavior**

## **Some Priorities**

**Made list of causes: Over 500 of them - inconsistent**

**Need framework to organize**

**NIMH Model as start**

**Integration with mid-level and macro-level variables**

**Integration with dual-process appraisal theories**

**Integration with bio-behavioral theories**

**Integration with decision theories**

## **Some Priorities**

**It's the dyad, stupid!**

**Must accommodate considerable individual differences  
in variable importance – tailored interventions**

**1 Adult year = XX adolescent years**

**Identifying determinants is only half the story**

**That is enough! Sit down.**