ECONOMICS ILLUSTRATED

A HIGH TECH HIGH PROJECT

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The Rationality of Teen Sex

Talen

In many adolescents' minds, the benefits outweigh the risks.

In the eye of an economist, everything has a price, even sex. When some teenagers are determining the "price" of sexual intercourse they might consider the possibility of contracting a disease or getting pregnant. Adults have always been encouraging their children that this price is too high; so why do teenagers continue to disobey their parents? The simple answer is that in many adolescents' minds, the benefits outweigh the risks. When they decide to have sex, they have come to the conclusion that the act of sexual intercourse will be worth it.

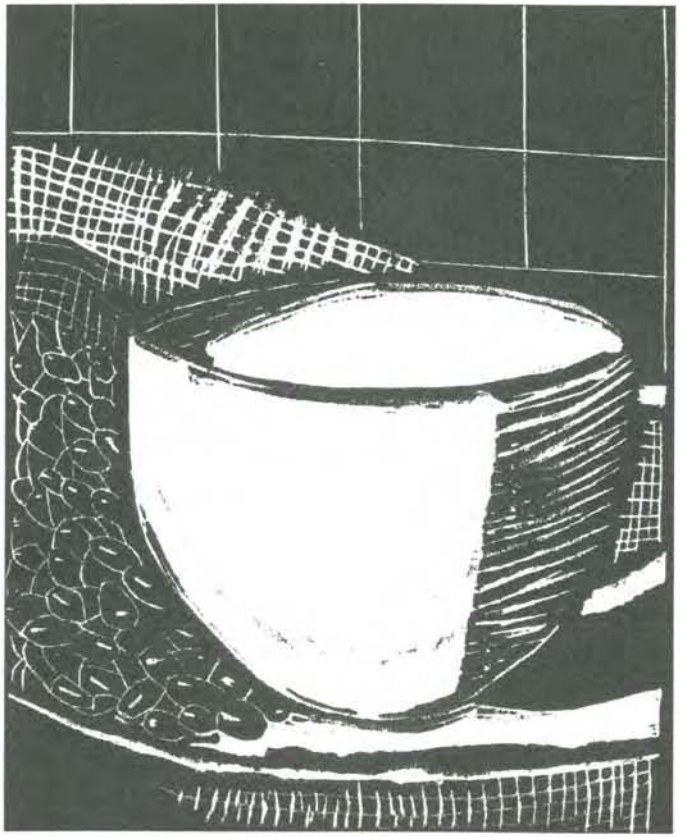
Parents will never be able to find a big enough disincentive until they start to think like teenagers. What adults think is rational and what teens think is rational can be severely different. Some experts say that they have found a way to discourage teens from engaging in sexual activities. John B. Jemmott III, a professor at the University of Pennsylvania who led a federally funded study, found two surprising statistics. The first is that only about a third of sixth- and seventh-graders who completed an abstinence-focused program started having sex within the next two years. The other is that nearly half of the students who attended other classes including ones that combined information about abstinence and contraception, became sexually active. John Jemmott takes these numbers to mean that when kids are taught only abstinence based learning, they wait longer to have sex.

While Jemmott might think he has the system figured out, Richard Caldwell believes that these numbers are imperfect. Caldwell sees that these numbers could be flawed mostly because the numbers rely on the truthfulness of the tested teenagers. Folks like Caldwell allow the possibility that some adolescents might not get the message, and, in this case, they want teens to be prepared to protect themselves.

The one thing that everyone agrees on is that at any door you come up to, a teenager is probably making an irrational decision behind it. Whether or not they can be taught rationality remains to be seen, but with almost half of our teenagers sexually active, there is an increased need for preventative education.

Elasticity

James



Elasticity refers to the extent that supply and/or demand respond to changes in price.

Something you always want to consider about elasticity is needs vs. wants. Basically, something that is a want is elastic, and something that is a need is inelastic (inelasticity is when a change in price doesn't affect supply and demand).

Example 1: One way to understand elasticity is by looking at the availability of substitutes. Generally, if there are many substitutes for a product or service, the demand will be more elastic. If the price of coffee were to go up by $1.00 at Starbucks, then people could go to McDonalds or drink something else like tea. Therefore, coffee at Starbucks is an elastic good because an increase in price would mean that most people would buy their coffee at a different location or drink another caffeinated drink such as tea.

Example 2: The income of a country's general population also affects elasticity. This is most common for non-essential products and services such as buying toys or going to restaurants and theaters. If the price for a bagel were to increase from $2.00 to $3.00 but Joe's income stayed the same, he would only buy coffee three days out of his work week instead of buying a bagel and coffee every day. In other words, he would be willing to compromise and buy fewer bagels since bagels are not an essential "need." Businesses that could potentially suffer from a recession include beauty salons, restaurants, car dealerships, and many other establishments that offer "wants."

Example 3: Inelasticity is the exact opposite of elasticity and means that a product's demand does not change based on its price. For example, people need running water in their home. Since this service is essential to their daily life, they must pay for it no matter what the price is. For addictive products such as cigarettes (which can be considered somewhat inelastic), time can be an influence on the elasticity of demand. Over time the consumer may realize that he or she can't continue to afford as many cigarettes and may buy fewer and fewer as time goes by.

Expressed vs. Revealed Preferences

Simone

Consumers' preferences are revealed by what they do, not what they say. Value is revealed by actions, not words.

Example 1: Even if a smoker says she puts infinite value on her life, every time she smokes a cigarette, her real preferences are revealed. She said one thing, but what she actually does is what she prefers, and she clearly does not put infinite value on her life.

Example 2: An economist joke goes like this: Two economists are in a Porsche showroom when one of them points at a car and says, "I want that." "Obviously not," replies the other economist. If he had really wanted the Porsche, he would have actually tried to buy it.

Example 3: A circumstance of revealed preference might be if a group of people took a survey and didn't actually do what they said they would in the survey. In *More Sex is Safer Sex,* Steven Landsberg quotes a survey in which 37 percent of New Yorkers said they would leave the city if possible. These people obviously stayed, since they took the survey in the first place.

Example 4: A survey was given to 3,240 high-achieving students to construct a ranking of U.S. undergraduate programs based on students' revealed preferences. When a student makes his decision among colleges that have admitted him, he chooses which college "wins" (his preference).

Salary Caps
Alex

Salary caps are a form of collusion and a form that doesn't seem to work very well at that.

Salary caps are limits to the amount of money that teams are allowed to spend on players' salaries. Salary caps have been implemented in several sports leagues to keep costs down and keep wealthy teams from signing more top players than other teams do. Salary caps are a major source of tension between league management and players' unions because they are designed to stop inflation of players' salaries.

Salary caps are a very obvious form of collusion. The league agrees to set the cap to a certain amount and robs the players of the right to earn a higher salary. This is something that goes on in the majority of professional sports.

In the NBA, there is a soft cap and a hard cap. Having a soft cap means there are ways for teams to pay the players more than the salary cap would otherwise allow. This can occur when teams are re-signing their own players. They are allowed to exceed the salary cap to do this. Teams are also allowed to sign a player and pay them the average NBA salary even if in doing this they go over the salary cap.

Salary caps work a bit differently in the NFL. There is no soft cap and if teams exceed the hard cap they have to pay huge sums of money. The salary cap has become an issue for teams in the past. In 2009 when the Patriots extended Matt Cassel's contract for another year, agreeing to pay $14 million they would have used $65 million of their $123 million salary cap going to seven players. This would leave the team with only $58 million left to pay the other 46 players on their roster.

Recently disputes have become heated between the NFL players union and league management. If these issues aren't resolved, they could lead to a year without a salary cap in 2010 and lockouts in 2011. This would be a bad thing for smaller teams. They would not be able to pay higher salaries to the better players so they might end up with a team full of worse players, while the richer teams would have an unfair competitive advantage because they could afford better players.

Predatory Pricing
Langston

In business and economics, predatory pricing is the practice of selling a product or service at a very low price, intending to drive competitors out of the market or create barriers to entry for potential new competitors.

Example 1: Microsoft used predatory pricing when they offered their internet browser for free. The competition could no longer sell theirs because Microsoft was offering it for free. Microsoft did this in order to control the market.

Example 2: Amazon was accused of predatory pricing for offering free shipping to its customers in France. Amazon was getting most of the business because of free shipping. When Amazon was told to stop or they would have to pay of a fine of 1000€ a day, Amazon continued to offer free shipping and paid the fine every day.

Example 3: OPEC used predatory pricing when they lowered the prices of their oil. They also pumped a lot more oil into the market to lower the prices. Smaller oil pumping companies couldn't afford to pump oil any more so they left the market, leaving room for OPEC to gain more market share.

Example 4: Kevin has loved surfboards all his life. He decides to open up a surfboard shop. He creates the surfboards for $150 and sells them for $400. Big Rick's surfboard shop has been open for a long time and used to be the only business in the surfboard market. Now that Kevin is making surfboards, Big Rick's is losing business. In an effort to get the market back to himself, Big Rick's begins to sell his boards at a loss for $100 even though he spends $150 on each one made. With Big Rick's new dirt cheap prices, Kevin can't afford to keep his business because of the lack of customers. With Kevin out of business, Big Rick's can start to sell his boards at a high price. He can do this because there is no competition to offer them at a lower price. This is predatory pricing because Big Rick's lowered his prices intentionally to drive his competitor out of business.

Regression Analysis
Gabe

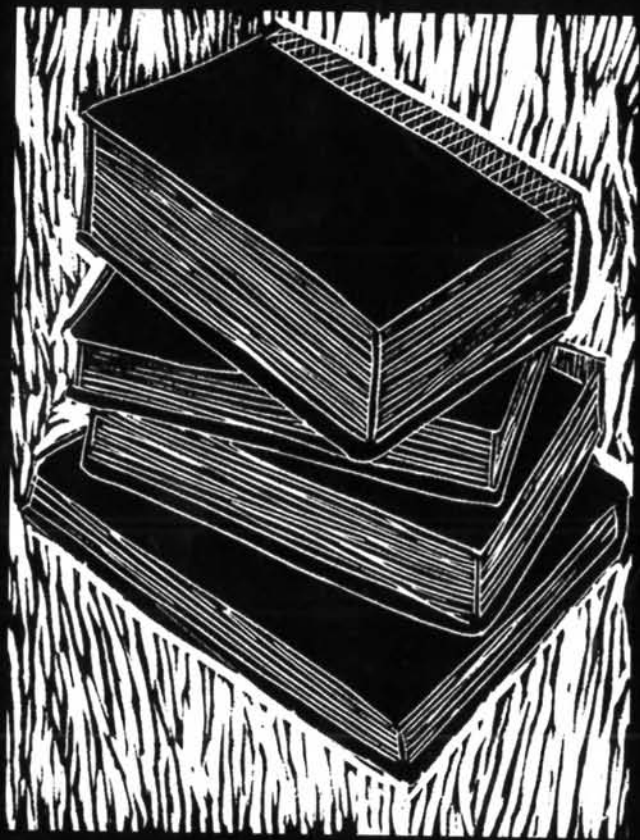
A statistical tool used to help find correlations between two or more variables.

Eric Morris, a transportation scholar from UCLA, recently ran a regression on a study on which gender travels more. Morris wanted to delve deeper into the results, to see if gender explained why men traveled more than women. He ran a regression that looked at age; number of children in the household; number of adults in the household; race/ethnicity; living in a center city, suburb, or nonmetropolitan area; family income; hours worked; weekly wages; and mode of travel.

Which variable had the most effect on the time spent traveling? Age. Morris found that gender really had no impact on travel time. While holding all other variables constant, Morris found that travel time steadily increases to until about age 36 and then starts to decline. He also found that income had the same correlation. Why? Generally, as a worker climbed through the workforce ladder, he or she became more involved in a company's work, thus increasing income and time spent at work. For example, a part-time secretary working at Kodak is going to travel less than a full-time engineer since the position of secretary requires the worker to be at Kodak less than an engineer would. This means that the secretary will have to spend less time traveling to and from work.

Gender is not a cause of increased or decreased travel time, as suggested by the study that Morris originally read, but rather a correlation. Thanks to the power of regression analysis, an unknown variable (what affects travel time) was solved by using fixed variables (age, income, race).

Regressions do not need to correlate to the economy in any way. They are simply a way to find correlations between two or more variables. Steven Levitt, an economics professor from the University of Chicago, used regression analysis to see correlations between how abortions now could heavily impact the amount of criminals in the future. This study has nothing to do with economics, yet uses regression analysis to correlate two variables.



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