

2040



GAGA UNLEASHES HER AMAZING POP STAR POWER!

TALES FROM 2040

#002

JUNE
2012

A dynamic illustration of Lady Gaga in a bright orange, futuristic, form-fitting suit with a high collar and a zipper. She has long, straight blonde hair with bangs and is looking forward with a determined expression. She is surrounded by motion lines, suggesting movement. To her left, a figure in a blue hooded cloak is lunging forward with a clenched fist. To her right, a figure in a purple hooded cloak is also lunging forward. The background is a dark, industrial-looking environment with purple and blue lighting.

**HOW LADY GAGA
FOUGHT CRIME, AIDS,
AND ABORTION RATES**

A SHORT STORY FROM A BRIGHTER FUTURE
BY CHRISTOPHER CARDINAL

TALES FROM 2040

**TALE #002: HOW LADY GAGA FOUGHT
CRIME, AIDS, AND ABORTION RATES**



CHRISTOPHER CARDINAL



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*To my parents,
thank you for loving this scoundrel*

*I can never repay the kindness you have shown me;
I can only pay it forward*

AUTHOR'S NOTE: PAY IT FORWARD

Neither Facebook, nor Apple, nor Lady Gaga asked me to spend seven years writing these books, and the decision to give them away for free was my own. No one owes me anything.

Tales from 2040 is an experiment. The goal is to build a network of paid professionals who work together to continue providing this unrequested consulting, developing more ways for powerful companies to make solving social problems a profitable part of their business, with donations from the public and each satisfied client funding the next project. This may be a worthwhile endeavor or a foolish daydream, but I trust the market will provide a clear answer.

If you feel this work is socially beneficial and wish to see it continue, please pay it forward by sharing these books with others, or better yet, sharing your own vision of a brighter future with the world. For details, please visit:

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HOW LADY GAGA FOUGHT CRIME, AIDS, AND ABORTION RATES

Quick question: How much should an engagement ring cost?

If you answered “two months’ income,” you’re not alone. This has been the accepted answer since the 1960s.¹ But where did the “Two Month Rule” come from?

Why, from the diamond industry, of course. Specifically, from De Beers, the global diamond cartel. However, De Beers not only told us how much to spend, but also convinced us that engagement rings were something we needed in the first place.

About a century ago, De Beers had a problem. Diamonds used to be rare, worn only by royalty. However, after rich deposits were discovered in Africa in the late 1800s, prices fell 99.98 percent, from \$500 per carat down to ten cents.² De Beers spent decades buying mines and stockpiles of diamonds, eventually controlling 90 percent of the world’s supply.³ To keep prices high, they made diamonds

artificially scarce again by closing the largest mines and releasing only a small amount per year. This left De Beers with vast warehouses full of tens of millions of unsold diamonds, but Americans were not buying them.⁴

At that time, diamond engagement rings were far from the norm. Instead, grooms- and brides-to-be usually gave each other small, inexpensive gifts. Even the more well-to-do did not give diamonds, as they considered other gemstones, like rubies, opals and sapphires, to be more exotic and appropriate for expressing love.⁵

To change this, in 1938 De Beers hired N.W. Ayer & Son, the nation's first advertising agency. Ayer took a multipronged approach, which included everything from a national ad campaign to hiring people to speak at high school assemblies, telling girls that only proposals accompanied by diamond rings were valid.⁶

Central to the strategy were America's royalty: celebrities. Ayer arranged to have famous actresses and models covered in diamond jewelry.⁷ De Beers gave diamonds to fashion designers and society writers to talk about the growing trend. Decades before "product placement" was a buzzword, De Beers paid to insert diamonds into the plots of movies and even change their titles to cast diamonds in a positive light.⁸

Their efforts worked. Within just three years, diamond sales increased by over half.⁹ In 1947, Ayer created what is widely regarded as the best advertising slogan in history: "A diamond is forever,"¹⁰ and by 1950, four out of five American brides received a diamond engagement ring.¹¹ De Beers' advertisements initially suggested that men spend a month's salary,¹² a figure they quickly doubled¹³ and later

cemented with ads that asked, “How can you make two months’ salary last forever?”

For decades, Hollywood continued to glamorize diamonds, from Marilyn Monroe singing “Diamonds Are a Girl’s Best Friend” in *Gentlemen Prefer Blondes* to Sean Connery playing James Bond in *Diamonds Are Forever*, a film that took its title straight from De Beers’ slogan. By getting celebrities to popularize their ideas and reinforcing them with messages across multiple media, De Beers convinced Americans to believe three ideas: Men should buy engagement rings, they should be diamond rings, and they should cost two months’ salary. To this day, we, as a society, continue to follow these rules.

Despite growing awareness of the slavery, torture, and genocide behind most diamonds, the vast majority of American men still give them as a symbol of romantic love. What’s more, we consistently shell out a sum in the ballpark of two months’ salary, before taxes.¹⁴ Not because any of this makes logical sense, but because it’s a “rule” we all know we are expected to follow.

Before De Beers came along, buying an expensive diamond engagement ring was almost unheard of. However, our perception of what is normal human behavior changed rapidly when a few high-profile celebrities convinced us we should act differently.

CHANGING EXPECTATIONS

Speaking of romantic love, here’s another quick question: When is the soonest a person should expect to have sex in a new relationship?

That's an easy one. We all know the answer: three months. However, not too long ago the answer was different. The "Three Month Rule" for sex has only been around since 2013, making it a more recent invention than the "Two Month Rule" for engagement rings.

Back in the early 2000s, the answer was not three months; it was three *dates*. Just like the "Two Month Rule," this "Third Date Rule" was also popularized by celebrities, like Jennifer Anniston on *Friends* and Sarah Jessica Parker on *Sex and the City*. Many sources reported that most people had sex on or before the third date, and it was widely accepted that if a couple had not become physical by then, the relationship wasn't going anywhere.¹⁵

This casual approach to sex led to several negative consequences in the United States. To begin, it contributed to a culture in which half of all pregnancies were unintended,¹⁶ and about four in ten of those – well over a million total¹⁷ – were ended by abortions each year.

This phenomenon had an even more detrimental effect on the spread of disease.¹⁸ Having sex so early in relationships meant coming into contact with more partners, which meant more risk. Moreover, these partners were by definition people who had casual sex, meaning they likely also had sex with other new partners more often, who in turn also frequently changed partners, and so on.

People were exposing themselves to dizzying numbers of potential sources of sexually transmitted diseases, and a single outbreak could spread rapidly. This helped explain the estimated 19 million new STD infections each year,¹⁹ almost half of which were among people under 25.²⁰ This was not surprising, considering American teens had sex

around as much as their counterparts in Canada and Europe, but were more likely to have shorter and less consistent sexual relationships and were less likely to use contraceptives.²¹ Several STDs were on the rise. Reported cases of chlamydia increased almost 20 percent between 2006 and 2009, and syphilis, which had almost been eradicated two decades earlier, increased almost 40 percent in the same three-year period.²²

These diseases were easily curable, unlike HIV. However, thanks to advances in antiretroviral drugs,²³ HIV was no longer a quick death sentence. While this was great news for anyone with the disease, it also meant an ever-growing number were living with HIV, an estimated one in five of whom were unaware they had it.²⁴ This also meant that the disease, which was once considered only a problem for the young, was soaring among older people. In 2009, those over 50 accounted for one in six new HIV infections and over a third of people living with AIDS in America.²⁵

AMERICA STANDING STILL

In the early 2000s, HIV was a different problem in the United States than in much of the rest of the world. In sub-Saharan Africa, home to almost 70 percent of the world's HIV-positive population,²⁶ there was limited access to health services and contraceptives²⁷ and a host of laws that punished homosexuality with imprisonment or death.²⁸ Widespread ignorance led women to believe men could not have AIDS if they looked healthy,²⁹ and infected men raped young virgins on the mistaken belief it would cure them of their disease.³⁰ Some lived in cities in which half the population and 70 to 90 percent of the prostitutes had HIV.³¹ On top of that, people had to contend with crushing poverty, famine, unclean drinking water, illiteracy,

unstable governments, widespread violence, and countless civil rights violations.

In spite of these conditions, through a combination of social programs, the rate of new HIV infections dropped by about a third in sub-Saharan Africa between 2001 and 2009.³² Africa was not the only region making improvements; most of the world was as well. During that same period, the worldwide rate of new HIV infections declined by a quarter.³³ Meanwhile, in the United States, the number of new infections had been about the same for two decades.³⁴

The rest of the world was also making progress in the area of reproductive health. Between 1995 and 2008, the rate of unintended pregnancies dropped almost 30 percent in developed regions and 20 percent in developing regions. The only region of the world that failed to improve during that period was North America.³⁵ Similarly, between 1995 and 2003, developed nations reduced abortion rates by a third and even developing nations reduced theirs by 15 percent. Again, during that time, America's abortion rate remained almost unchanged.³⁶

We had few excuses for our lack of progress. Both STDs and unintended pregnancies were more prevalent among Americans with lower incomes,³⁷ but "poor" is a relative term. What we consider poverty in the United States is still a better situation than average life in many developing countries, which, unlike America, were continually making headway against their problems.

By contrast, along with drastically better living conditions, the United States had high levels of sexual literacy, AIDS awareness, and access to contraceptives and healthcare.

Yet no one could have guessed that by looking at how we compared to our peers. Among developed nations, the United States had the highest rate of HIV,³⁸ one of the highest unintended pregnancy rates,³⁹ and the highest teen pregnancy rate – three times higher than Canada and about ten times higher than Switzerland.⁴⁰

Despite our privileged lifestyles as Americans, we had only our carelessness to blame.⁴¹ One of the main reasons: We had stopped using condoms as often.⁴² Some said this trend began among heterosexuals, when they realized that HIV was primarily spread through sexual contact between men.⁴³ Others said gay men had become less fearful due to advances in antiretroviral drugs, seeing HIV as a manageable chronic condition rather than a deadly disease to avoid at all costs.⁴⁴

However, these problems affected everyone. About half the people living with HIV were gay or bisexual men, with the other half split evenly between women and straight men,⁴⁵ and no one was being careful enough. Seven out of eight people who contracted HIV did so through unsafe sexual contact,⁴⁶ and failed contraception only accounted for 5 percent of unintended pregnancies. Most of the time, neither partner used any at all.⁴⁷

We caused our own problems by voluntarily engaging in what we knew to be risky sex.⁴⁸

We knew we could reduce the rates of unintended pregnancies, abortion, and HIV by being a little more sexually responsible. But who was influential enough to get us to change?

LADY GAGA

Many contributed to this behavioral shift, but most of the credit rests on the shoulders of one woman: Stefani Joanne Angelina Germanotta. Known worldwide as an artist, fashion designer, and philanthropist, Germanotta is even more famous as a singer under her stage name: Lady Gaga.

Gaga has set many records in the 32 years since she released her first album. Along the way, she became the youngest recipient of the Grammy Lifetime Achievement Award⁴⁹ and she unseated Elvis Presley and Mariah Carey to become the artist to spend the most cumulative time at number one.⁵⁰

She has also set records with the money she has earned. Over a decade before she introduced her high-end clothing line, Gaga had already made a fortune through music sales, promotional agreements, and especially touring. Gaga's 2009-11 *Monster Ball Tour* was the highest-grossing tour for a debut artist⁵¹ and one of the most successful tours of all time, earning amounts similar to those of Bruce Springsteen, Cher, The Rolling Stones, and U2 near the end of their careers, yet Gaga had only begun.⁵²

In 2022, she became the youngest self-made female billionaire,⁵³ as well as the first to sign The Giving Pledge, the effort started by Bill and Melinda Gates and Warren Buffett to convince the wealthiest Americans to give most of their riches to charitable causes.⁵⁴ Notably, she was also the first singer in history to reach the ten-digit mark with her bank account.⁵⁵

However, even at the very beginning of her career, Gaga was already breaking records.

In 2008, her first single, *Just Dance*, became a number one hit in six countries and was nominated for a Grammy.⁵⁶ Later that year, her second single, *Poker Face*, reached the top of the charts in twenty countries and was nominated for three Grammys, winning one.⁵⁷ *Poker Face* spent a record-breaking 83 weeks on Billboard's US Hot Digital Songs chart,⁵⁸ and with subsequent singles *LoveGame* and *Paparazzi*, Gaga became the first artist to release four number one pop music hits from a debut album.⁵⁹

Over the next few years, Gaga also broke records in online popularity. She was the first artist to have her videos viewed over a billion times,⁶⁰ and at various points she was the most searched-for female on Google,⁶¹ the person with the most followers on Twitter,⁶² and the most "liked" living person on Facebook.⁶³

BORN THIS WAY

Even her harshest critics had to admit that her marketing prowess was legendary. In 2011, to promote her second studio album, *Born This Way*, Gaga appeared on dozens of television shows, including *American Idol*, *The Oprah Winfrey Show*, *Good Morning America*, and her own HBO concert special.⁶⁴ However, Gaga also promoted her music in many non-traditional ways, including making several deals with the giants of the tech industry.

After collaborating on a relief effort for victims of an earthquake and tsunami in Japan, she partnered again with web game maker Zynga to create *GagaVille*, an extension of *FarmVille* (one of the most popular games on Facebook),⁶⁵ through which fans could hear songs from *Born This Way* before it was released.⁶⁶

Within hours of releasing one of the songs on the album, *Edge of Glory*, Gaga asked fans via her website to post videos of them singing along or dancing to the music. About a week later, selected videos appeared with the song in an ad for Google Chrome⁶⁷ that aired during the season finale of *Saturday Night Live*. The episode, hosted by Justin Timberlake just two days before the album launch, featured Gaga not only singing, but also participating in several skits, a rarity for musical guests.⁶⁸ The day it was released, Amazon sold the album for 99 cents to promote its new cloud music service, an offer so popular that it crashed their servers, prompting them to repeat the sale three days later.⁶⁹

Gaga also showed considerable savvy in the emerging realm of mobile marketing. Disney sold her songs along with a popular game that rewarded players for tapping and shaking their phones along with the beat.⁷⁰ Starbucks hosted a digital scavenger hunt that started by using a mobile phone to scan a code at their stores and ended with Lady Gaga-themed prizes.⁷¹ Gaga also signed autographs at Best Buy, who gave free copies of the album to purchasers of select mobile phones.⁷²

As a result of all her efforts, Gaga broke even more records. Her single *Born This Way* debuted at number one to become the one-thousandth leader of the Billboard Hot 100 chart, staying at the top for six weeks.⁷³ Within five days, she sold more than a million digital copies, making her the fastest-selling artist in *iTunes* history.⁷⁴ The song reached an audience of over 78 million the week it began its airplay, the highest opening since the Radio Songs chart combined all radio formats in 1998.⁷⁵

The album, also called *Born This Way*, reached the top of the charts in 25 countries. Just like the single, the album also sold over a million copies in the first week, outselling the next 42 albums in America combined,⁷⁶ and was a major contributor to the music industry's first gain in album sales in seven years, owed entirely to digital sales.⁷⁷

In 2011, Gaga was named the most charitable celebrity for the second year in a row,⁷⁸ in part for creating the Born This Way Foundation, a non-profit dedicated to ending youth bullying and creating a “new culture of kindness, bravery, acceptance and empowerment.”⁷⁹ Yet all the promotion, popularity, and philanthropy connected to *Born This Way* still paled in comparison to what Gaga did next.

SLOW DOWN

Following the success of *Born This Way*, Gaga's next album was eagerly anticipated around the world. Her publicity machine fired up a full six months before its release, putting together more corporate partnerships and promotional deals than ever before.

Gaga herself, however, who had a habit of making several high-profile appearances a day, was almost nowhere to be seen. Instead, she was holed up in her recording studio for weeks on end. She uncharacteristically canceled a handful of promotional events, apologizing to fans and citing her need to spend more time on the album. Representatives said that Gaga was “hard at work on a revolutionary project unlike anything the music industry has seen before,” but other than that, gave no details. Reporters snapped photos of several other musicians entering her studio, but when questioned, they were just as tight-lipped as Gaga's team,

leading the press to call what Gaga was up to “the best-kept secret in the entertainment industry.”

Rumors swirled. Was she sick?⁸⁰ Did she have a breakdown? An addiction? Between the mystery of her reclusiveness and the fanfare of a much-hyped countdown, Gaga frenzy hit a fever pitch as her deadline loomed.

SINGLE RELEASE

Her fans, as it turned out, had nothing to worry about. Right on schedule, on May 31, 2012, Gaga released the eponymous single from her new album: *Slow Down*. Also, just as promised, it was different. Very different.

It had all the hallmarks of her previous smash hits. A powerful intro with a catchy hook. Check. An irresistible rhythm and a creative chord progression. Check. An infectious melody that stuck in our heads for days at a time. Check. *Slow Down* had a brand new, unique sound that forced us to dance and made us want to sing along, but something was missing: the words.

The song’s structure was distinctly lyrical. It had three well-defined verses and a bridge interspersed with a chorus. However, Gaga sang only two phrases throughout the entire song: “Slow down,” which started each of the first three bars of the chorus, and “Slow down and think about it,” which ended the chorus. After the music built to a crescendo at the end of the song, it cut to silence for Gaga to repeat the “Slow down and think about it” hook, and that was it. Other than that, she only vocalized some meaningless syllables and sustained notes, and even then, her voice was so muted that it was barely audible.

Fans and critics alike were confused. *Slow Down* still opened at number one, and the blogosphere erupted in a debate over whether it deserved to do so. Some said Gaga was resting on her laurels and claimed that if any other artist released the song, it wouldn't even make it onto any chart. Others defended her, claiming that anyone who didn't like it had no appreciation for modern art. After all, Gaga once wore a dress made entirely of raw meat and another made of Kermit the Frog dolls; an odd song was just her being avant-garde.

On the other hand, the song obviously sounded like it should have had lyrics, and their absence frustrated several critics into panning *Slow Down* in their reviews. One called it "painfully incomplete." Another: "One track short of a masterpiece." Another: "The song has no words. Does the empress have no clothes?" Yet another quipped that, "Exhausted from all the 'work' she's been putting in, Lady Gaga must have accidentally shipped the karaoke version, since all we hear are the backup vocals."

In an article titled *Has Lady Gone Gaga?* one journalist asked the question on the minds of even her most die-hard fans: "We waited six months for this?"

PRESS CONFERENCE

It was not until almost a week later that the song's true genius was revealed.

On June 5, 2012, Gaga held a press conference in Los Angeles. Rather than a Hollywood club or her record label's Santa Monica studio, though, she spoke from a small grassy platform in the quad outside the UCLA School of Medicine.⁸¹ In addition to the unconventional location, those in attendance were not the typical crowd to cover pop

musicians. The press was notified in advance that space was limited and that priority would be given to hard news reporters over those covering the entertainment industry.

Writers from *Rolling Stone*, *Spin*, and *NME* were still welcomed, but were relegated to the back rows to make way for representatives from the major American news outlets. Overall, every aspect of the event had the look and feel of a presidential press conference rather than a musician's publicity stunt, right down to Gaga herself.

The singer was infamous for showing scandalous amounts of skin while wearing outfits made of outlandish materials like mirrors or plastic bubbles. This day, however, Gaga wore a stylishly tailored pinstriped suit. Instead of a wig she wore her natural hair in a tight bun, and in the place of oversized shades were tasteful wire-rimmed glasses. Through her keen fashion sense, Gaga transformed herself from a pop icon into a dignified stateswoman. Only her heavy eye makeup and high hemline separated her from the image of a visiting foreign dignitary. Yet she wasn't just wearing a costume. She spoke with poise and grace that belied her mere 26 years of age:

This is where it started.

On this day, 31 years ago, researchers working here at UCLA were part of the small team that first identified AIDS among five gay men living in Los Angeles.⁸²

Since then we have learned much.

We have learned that AIDS affects everyone, regardless of race, income, or sexual orientation. We have learned that AIDS is caused by HIV, and how to test for it. We have learned that HIV is transmitted from person to person through unprotected sex and sharing needles. Although we have not yet learned how

to cure it, we have learned how to suppress HIV with drugs to impede the onset of AIDS.

Most importantly, we have learned how to prevent the spread of HIV.

But we are not doing this.

The annual number of new HIV infections in the United States has been almost the same for 20 years.⁸³ Just as we were starting to beat this disease, we became complacent.⁸⁴

This is where it started. Now is when we end it.

...

Last week I shared Slow Down, which, as you already know, is incomplete.

This is because Slow Down is not a song. It is an idea.

Slow Down is a call to take control of our lives. To love ourselves enough to make better choices. To live up to our potential as the kings and queens of this amazing world.

Slow Down is an idea, but it is not just my idea.

Over the last year I have been honored and humbled to work with several of the most talented and creative minds in the industry.

Each artist used my song as a musical canvas, adding to it their own music and lyrics to spread the message of Slow Down in their own words.

The sound you heard last week was not a finished product. What you heard was the beginning of a movement.

The first of these collaborations will be released tomorrow: Slow Down by Justin Timberlake. On Friday: Slow Down by Elton John. Saturday: Slow Down by The Rolling Stones. Sunday: U2. Monday: Taylor Swift.

In the following 30 days, you will also hear versions of Slow Down by Aerosmith, Beck, Justin Bieber, the Black Eyed Peas, Kenny Chesney, Coldplay, Daft Punk, Neil Diamond, Gloria Estefan, Green Day, Jay-Z, Billy Joel, Alicia Keys, Jennifer Lopez, Maroon 5, Bruno Mars, Muse, One Direction, Paul McCartney, Reba McEntire, Sarah McLachlan, Moby, the Red Hot Chili Peppers, Carlos Santana, Bruce Springsteen, George Strait, Barbra Streisand, Weezer, Kanye West, and Stevie Wonder.

Over 85 artists have completed songs for the Slow Down Project so far, which means a new song will be released every day until at least the end of August, and more are still in production.

Each single will be available for individual sale through Amazon, and anyone who pre-orders or buys the upcoming Slow Down album will receive, in addition to the fifteen new songs by me, a free copy of every different Slow Down single via digital download as each is released, plus access to interviews with the artists and behind-the-scenes footage from the recording studio.

...

The music industry has a long history of supporting the fight against AIDS. David Geffen, after whom the building behind me is named, gave 200 million dollars to this very school, the largest donation of its kind, as well as millions to groups like AIDS Project Los Angeles and AIDS Action in Washington.⁸⁵

But you don't have to make a fortune to make a difference.

One hundred percent of the proceeds from every Slow Down single as well as from the Slow Down album will be split between four charities working to fight HIV and AIDS. Details can be found at SlowDownProject.com.

You don't have to spend a dime, though, to help in the most impactful way. You can help by joining the movement.

...

In many of these songs, you will hear references to "three months" or "The Three Month Rule."

The Three Month Rule is this: Wait at least three months after dating a new partner exclusively before having sex.

This is not an arbitrary period of time. Three months is the soonest after possible exposure that a negative HIV antibody test can be trusted to be accurate.⁸⁶

The Three Month Rule does not replace other safe sex practices. We still need to be tested for STIs frequently and we still need to use proper protection every single time.

Sex is beautiful, but when we don't enjoy it responsibly, it can be destructive.

...

For over 30 years we have lived in fear.

This is where it started. Now is when we end it.

Help keep sex beautiful. Join the movement. Slow down.

By working together, we will be the generation to beat AIDS.

When Gaga finished speaking, the questions from reporters were initially drowned out by the cheering from thousands of UCLA students piled up behind the ring of security guards to get a peek at her. Eventually she quieted them with promises of autographs and opportunities to take photos with her after the press conference. She stayed

for another three hours meeting with fans before leaving to catch a flight to France.

There, she repeated the entire event at the Pasteur Institute in Paris, where HIV was first discovered, delivering a similar speech in flawless French to international news outlets like BBC World News, Reuters, and Al Jazeera, as well as the United Nations and the World Health Organization. She received another standing ovation there, although this time it was from the press.

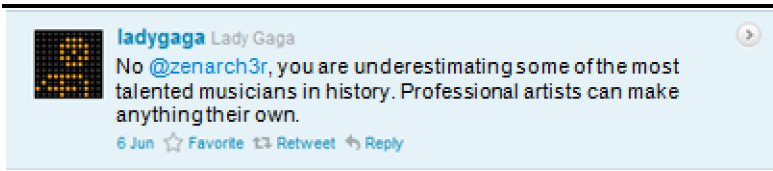
Between the headlines generated and the steady stream of singles from A-list artists being released, it soon became virtually impossible to look at a newspaper or turn on a radio or television without being bombarded with the message of *Slow Down*.

The movement had begun.

MORE BROKEN RECORDS

When fans learned they would get at least 100 songs for eight dollars, which would go entirely to charity, they reached for their credit cards and drove a digital stampede to Amazon. In fact, Gaga broke the record for album presales within a few hours of the first press conference. Detractors soon predicted people would quickly tire of hearing the same song over and over. Gaga fired back at one critic on Twitter:

Illustration: Tweet from Lady Gaga



Gaga was right. Despite being based on her work, each of the singles turned out to be dramatically different. They were not just remixes. Each had completely unique lyrics sung by different vocalists, and Gaga only performed backup vocals or harmonies in most versions. One artist transformed the melody into soul music; another sped the tempo up to a Texas two-step. In fact, the only person who made a version that sounded like Gaga's original single was Madonna, who said it was a tongue-in-cheek payback for Gaga using a chord progression that made *Born This Way* sound uncomfortably similar to her own 1989 hit *Express Yourself*.⁸⁷ As far as all other versions were concerned, if they did not all share the same name, casual listeners would not even notice the songs were related. For example, in their last song recorded together,⁸⁸ The Beastie Boys turned *Slow Down* into an old school rap, rapidly trading lines between the three singers and mixed samples of Gaga:

AR: I'm ready like a soldier on a day furlough

MD: And she's tasty like spaghetti with a great merlot

*MCA: I got rhymes like Eddie Poe and Hank Dave
Thoreau*

(Slo-slo-slo-slo-slow slow down)

ALL: But you gotta go slow until you know you know

...

*MCA: I got a winnin' hand 'n' I'mma bet before I show
it*

MD: I'mma take my time 'n' I'm not gonna blow it

*AR: So I can live to carpe diem just like a dead poet
(Slow dow-dow-dow-dow down slow down)*

*ALL: 'Cuz you know you gotta slow it 'til you know that
you know it*

Katy Perry, on the other hand, slowed the song down to a pop ballad from a love-struck woman to the man who just ended their relationship. In it, she begs him to wait three months before moving on to a new woman, with Gaga providing backup vocals:

*(Slow down) You left in September
 (Slow down) Just wait 'til December
 (Slow down) Don't you remember
 The way you felt before, make sure we're really over
 (Slow down and think about it)*

In an interview, Perry said the protagonist's take on the Three Month Rule was as much about the former boyfriend's well-being as the sting of being replaced:

She still loves him, so of course she doesn't want him to jump right into bed with someone else – but she also cares about him and doesn't want him to do something stupid because he's lonely.

Breakups are awful, but they're part of life. Rebound sex in general is just a bad idea. Everyone gets hurt.

Also, the participating artists were spread across so many genres that most people did not hear every version, especially if they stuck to only one radio station. In the first month, Spanish-language stations only played two different *Slow Down* songs, country stations played three, and adult contemporary played five or six. Some stations played every new single the day each came out, regardless of format, but only stations with Top 40 Mix or Dance formats played more than a handful of them consistently afterward.

Gaga's unprecedented move of marketing genius kept various versions of *Slow Down* at the top of the radio

charts for months, as listeners called in with requests to hear each new artist's take on the theme.

Since each song was credited to the main vocalist (e.g., "*Slow Down* by Beyoncé feat. Lady Gaga"), Gaga herself was technically ineligible for many sales records, but collectively the songs set records that had never existed before. For example, a few weeks after *Slow Down* was released marked the first time that over ten of the songs on the Top 40 Chart had the same name. Also, while a few performers had recorded songs that appeared on two charts at once (notably country, Latin, and Christian singers that crossed over to appeal to the pop music crowd), Gaga became the first contributing artist to appear on twelve different Billboard Top 10 charts at the same time, including Pop, Adult Contemporary, Dance/Club, R&B/Hip Hop, Rap, Rock, Hard Rock, Alternative, Country, Latin, Latin Pop, and Christian.

Through all this radio play, *Slow Down* reached millions of people in the United States alone who would otherwise never have heard Gaga's music. Gaga struck while the iron was hot by making her album available for sale via text message. Listeners could act while the desire was fresh in their minds by adding the cost of the album to their mobile bill, receiving a message back with a code that unlocked the album at Amazon. A similar practice is common today, with about 30 percent of music sales made via mobile phone, including most sales to minors (since they do not have credit cards), but at the time this method was almost unheard of.

Regardless of how they bought it, fans were treated to new songs and videos added to their Amazon Media Library every day. In the modern era of all-digital goods, bands

routinely add photos, videos, and even new songs to albums for months after they are released, and most reward early buyers with even more extras. Everyone wins – artists get more opportunities to connect with fans, consumers get more for their money, and retailers like Amazon and Apple get more traffic – but again, at the time, the concept of a living album was brand new. This helped steer the music industry’s slow-turning mentality away from treating albums only as permanent, unchangeable goods and helped Gaga sell more copies of her album before it was released than most albums ever sell at all.

When the *Slow Down* album was finally released, it didn’t disappoint. In addition to the original, nearly wordless version of the *Slow Down* single, it included 14 other new tracks by Gaga, four of which also reached the top of the pop charts.

This was back when music was still distributed on compact discs, although the practice was already rapidly declining, with digital sales surpassing physical media in 2012.⁸⁹ However, even though the CD cost twice as much as the digital version, it still sold well. It included a photo album, liner notes, and a printed code that unlocked all the *Slow Down* singles on Amazon, plus two dozen bonus remixes.

But the most remarkable feature of the physical album wasn’t inside the package; it was the package itself. The album cover appeared to be an illuminated traffic sign that flashed between the words “LADY GAGA” (with an image of a person) and “SLOW DOWN” (with a skeleton), a convincing illusion created by a grid of raised holographic discs. The design was based on an actual traffic sign introduced in New York City in 2011 that flashed “SLOW DOWN” to drivers exceeding the speed limit.⁹⁰

Illustration: Holographic album cover



The entire cover was printed on thick vinyl and backed with strong adhesive, making it a durable sticker that fans soon proved could be put almost anywhere.

THE MOVEMENT SPREADS

The sticker showed up on traffic signs, store windows, and the walls of public buildings, flashing the message of *Slow Down* to all passersby. Even more fans put the stickers on personal items, and it wasn't uncommon to see people with several copies of the album cover on their cars or school notebooks. Since everyone knew that all proceeds went to charity, the stickers served as physical proof of their donation, a badge of honor in the fight against AIDS, and multiple stickers signified a larger contribution.

In fact, initial sales reports showed an abnormally large number of people bought multiple copies of the CD. In the resale market, simple economics made the cover worth more than the rest of the album, as the demand for the sticker was much higher than the demand for all those extra CDs. There was also a huge spike in vinyl record

sales, presumably to get the foot-wide version of the sticker. Eventually, to prevent waste, Gaga simply sold the stickers directly online.

Banksy, an anonymous graffiti artist with an international following, painted a 15-foot image of the skeleton from the album cover on the side of a government building in his hometown of Bristol, England. His work made headlines and photos spread on the internet, inspiring copycats to repeat the act in cities around the globe. Another artist distributed a set of stencil patterns online, prompting activists who had never before touched a can of paint to tag public spaces with “SLOW DOWN” or add the skeleton, which had become the icon of the movement, to countless traffic signs that already had the words on them. Between budget cuts to local cleanup crews and the positive nature of the message, most cities did not rush to remove them.

GAGA GARAGE

Fans spread the word with stickers, spray paint, and skin (the skeleton remains a popular tattoo even today), but they also did so through music.

Rather than slamming people who borrowed her work with DMCA takedowns and copyright violation lawsuits like so many artists of the day, Gaga embraced them; in fact, she encouraged them. Along with the release of her album, Gaga announced a contest called the Three Month Challenge. For 90 days, fans were invited to make their own versions of her song and share them at *SlowDownProject.com*, where they would be rated by their peers. The highest-rated entries would be reviewed by a panel of judges from the recording industry, including Gaga. The panel would choose ten winners, who would

receive prizes and the honor of having their songs added to the *Slow Down* living album.

However, Gaga did not want to limit the contest to only those with access to professional audio equipment. To that end, her team partnered with Apple to create *Gaga Garage*, a free online application powered by the company's popular *GarageBand* music creation software.

Gaga Garage made it easy for anyone to make their own songs. The main application worked on all platforms and required no download or installation, running instead through any web browser, and operated in two modes. "Lyrics Mode" was simple and straightforward. Writers could use a simple text editor to modify the song's words, and singers could record vocals while the music played and the lyrics appeared on the screen, similar to karaoke. All they needed was a microphone or a webcam, or, if they preferred, they could download the *Gaga Garage Lite* mobile application and sing into their *iPhone*.

Switching to "Music Mode" revealed a fully-featured audio and video editing application which, just like *GarageBand*, made its powerful features pleasantly easy-to-use. It was preloaded with all the same audio content that Gaga had given to her fellow artists when she asked them to make their own versions of *Slow Down*. This included the unmixed tracks for the original song in six different keys and at seven different tempos, 15 variations on the melody, 30 percussion tracks, and over 2,000 words and sustained notes sung by Gaga as backup vocals, plus a continual influx of audio samples from new versions of the song as they were released. Gaga also shared 90 minutes of previously unseen footage which fans could use to make

their own high-definition music videos. Anyone who wanted more could upload their own digital content.

The design of *Gaga Garage* encouraged collaboration. All work was saved online and could be edited in either mode interchangeably. Advanced users could export to and import from the *GarageBand* native format if they wished to use a professional music studio.

Each musical aspect was rated individually, so songs with good lyrics but poor production quality attracted talented singers, who asked to be added to the project so they could record the vocals. These in turn caught the attention of semi-professional musicians and aspiring DJs who arranged and mixed the songs, then others made accompanying videos.

Such an experimental project might have fizzled under anyone else's care, but Gaga's online marketing prowess was unparalleled. Tim O'Brien, vice president of business development at Disney Mobile, said:

I've never seen anything as powerful as when Gaga hits her social media channels.⁹¹

According to a community manager at USC:

Gaga and her team are some of the best marketers around; they understand the importance of integrating social with traditional media, engaging audiences in real-time, and most of all, telling a story that is relatable and worth spreading.⁹²

Gaga constantly plugged the contest, but more importantly, she integrated tools into *Gaga Garage* that let fans easily promote their creations through social

networking tools like Facebook and Twitter. Soon, the internet was abuzz with thousands of versions of her song.

As it was, the project was a runaway success for everyone involved. Gaga connected in a meaningful way with her fans, who translated her message into their own words and shared it with their friends. Apple exposed its award-winning software to hundreds of thousands of potential customers and made waves throughout the tech industry by showing off the power of its *iCloud* computing platform. (Today, of course, virtually all consumer software applications are delivered via cloud computing, but it was still a relatively new concept at the time.)

The biggest winners, however, were the fans themselves. Through *Gaga Garage*, thousands of people started successful projects with only a portion of a song, then found others to fill in the gaps in their skillsets until they had a polished result, forming impromptu “bands” along the way with people they had never met before. This innovative use of technology helped fans discover hidden talents, make new friends, and experience the fulfillment of contributing to something greater than they could accomplish on their own.

The volume of truly impressive work submitted to *SlowDownProject.com* was overwhelming.⁹³ Gaga and the panel of judges ultimately chose 16 songs to add to the *Slow Down* album, and their creators ended up receiving a lot more than the prizes promised in the contest details.

GAGA ON TOUR

Gaga's *Slow Down Global Tour*, which had sold out in over 30 countries,⁹⁴ began shortly after the album was released. During the very first show, the crowd knew that *Slow Down* was about to be performed when the stage lit up with huge traffic signs playing animations synced to the complex choreography of a troupe of dancers covered in lights.

The audience was nonplussed when Gaga began singing her backup vocals to a recording of Justin Timberlake's radio version of the song. They had paid to see a live show; then again, how else would Gaga perform a song that had no words of her own? But they were appalled when the music started skipping with the sounds of a CD player malfunction, making it obvious that Gaga had been lip syncing.

"Stop it, stop it, cut the music," boomed a familiar voice. It came from one of the dancers, who removed his costume to reveal he was, in fact, Timberlake himself. "Ms. Gaga," he continued, "I told you we had to do this live."⁹⁵

The crowd turned ecstatic as Timberlake and Gaga launched into the real performance: a rock adaptation of his *Slow Down* love song, his first single since focusing on his acting career in 2007.⁹⁶ Fans were similarly floored at the second show when a gigantic turntable brought Elton John and his piano to the stage to perform his own version of *Slow Down* with Gaga. Although she never repeated the CD-skipping prank (the cat was out of the bag after the first show), Gaga also never announced before a show who the guest singer would be, and sometimes surprised her audiences with up to three other artists in one night.

After the Three Month Challenge ended, Gaga added yet another twist by incorporating a version of the song made by a different group of fans into each show. She played their music, broadcast their videos on a huge projection screen, and, just like the cameos from their famous counterparts, provided backup vocals while the amateur singers performed live. Afterward, everyone who worked on the song got to take a bow from center stage. By the end of the tour, Gaga was joined by the creators of all 16 winning entries as well as the individuals and groups behind over 90 other versions of the song at various stops around the world. These acts were tame compared to Gaga's normal theatrics (partially due to the insurance risk of inexperienced performers on the stage) and they didn't always go smoothly, but fans were understanding, and those who weren't consumed with jealousy cheered just as loudly as for Gaga herself.

CELEBRITIES

Adding their voices to those of Gaga's fans were many other celebrities who also joined the movement. Ultimately, the Hollywood elite played just as important of a role in the spread of the Three Month Rule as they did with the establishment of the Two Month Rule for engagement rings. To begin, the success of the Slow Down Project sparked a trend of discussing sexual responsibility in popular music that lasted for years. In fact, Gaga's movement touched off a wave of top ten songs that promoted not just waiting, but abstinence, a topic previously restricted to the narrow niche of Christian music.

A few months after her version of *Slow Down* aired, Beyoncé released *You're Worth the Wait*, which

encourages women who want to remain abstinent to stick to their guns. Many saw the song as a logical extension of her hit *Single Ladies (Put a Ring on It)*, which was named the best song of 2008 by Rolling Stone⁹⁷ and spent three weeks at number one before being dethroned by Gaga's debut single.⁹⁸ However, more careful listeners knew that, despite being commonly misunderstood to advocate marriage, *Single Ladies* was actually about a woman telling an ex she had moved on (and flaunting it). By contrast, *You're Worth the Wait*, which also featured Beyoncé's husband Jay-Z, overtly applauds women who want to wait until marriage and shames men who try to persuade them to abandon their principles.

Jessica Simpson, who, despite four top ten albums⁹⁹ and a billion-dollar fashion line¹⁰⁰ considers remaining a virgin until her wedding night her crowning achievement,¹⁰¹ declined to make a *Slow Down* song, saying she supported the idea but that the message was not strong enough. Simpson nevertheless made a return to radio¹⁰² with *Ravenous*, a steamy account of the pleasure that a man could expect in her bedroom – but only after they were married. Simpson, who was a poster girl for sexual restraint long before Gaga arrived on the scene, said she got the idea from a well-known line from Cervantes' *Don Quixote*: "Hunger is the best sauce in the world."¹⁰³

Other songs warned of the dangers of deceitful lovers. Soul singer Adele recorded *The Final Chapter*, a melancholy piece about a friend who died after contracting HIV from a man who knew he had it, but lied. Apart from Adele's preternatural vocals, the song stood out on the radio due to its structure, clocking in at under two minutes and containing only a long piano solo, then a single verse:

*If all promised were done
Then I'd still hear your laughter
If all spoken were true
Then I'd still feel your love
If our lives were a book
There might be one more chapter
But all stories must end
Even those about us*

Along a similar vein, Faith Hill, accompanied by husband Tim McGraw, recorded *Beautiful Stranger*, which tells of a whirlwind romance that takes a heartbreaking turn. A young woman overhears her new beau talking to another woman, repeating the same sweet things he said to her the night before. She comes to discover that he has used those lines, along with his good looks, to seduce hundreds of women, and he doesn't even remember her name.

According to Hill, the cautionary tale was inspired by the story of a family friend who had remained abstinent well into her twenties and intended to wait until marriage. However, she became depressed after her fiancé broke off their engagement, and soon thereafter had a one-night stand with a handsome man she met at a bar. As a result, she became pregnant the very first time she had sex.

Of all the genres touched by Gaga's movement, though, the largest shift was felt in hip-hop and rap music. After decades of criticism for its glorification of violence, substance abuse, and unprotected sex, it seemed an unlikely place to hear messages promoting responsibility. However, AIDS in the United States is more concentrated in poor urban areas, particularly among African Americans, making it an important concern to the primary audience of hip-hop. Moreover, whereas other types of music weaved hints of ideas into otherwise normal songs,

rap lyrics were anything but subtle. The plain nature of its spoken word format allowed artists to discuss condom use and the Three Month Rule (or, as the hip-hop community called it, “The Nine-O”) in no uncertain terms.

On the day his version of *Slow Down* was released, Kanye West changed his Twitter icon to a red AIDS ribbon. Then, for a solid month thereafter, he broadcast information about how the disease has disproportionately affected the black community to his 8 million followers.

Illustration: Tweets from Kanye West¹⁰⁴



At the end of the month, West released *Don't Care*, a song in which he talked about the dangers of unprotected sex and intravenous drug use:

*You get high / to get by / don't care if the needle's dirty
Smoke crack / 'n' bareback / don't care if you die by
thirty*

Don't Care also addressed the “down low,” a young and predominantly black underground subculture that arose

from the fact that black men who have sex with men (MSM) were far more likely not to think of themselves as gay or bisexual and to hide homosexual activity from female partners.¹⁰⁵

At the time, young black MSM were more likely than any other race or age group to contract HIV, and were also the least likely to be aware of their infection.¹⁰⁶ Fueled by a CDC report that a third of young urban black MSM had HIV, but 90 percent of them didn't know it,¹⁰⁷ the secretive lifestyle was controversially blamed for the extremely high HIV rates among black women who did not know of their partners' homosexual activity.¹⁰⁸

West, who publicly supported his openly gay cousin¹⁰⁹ and had bravely risked career suicide by criticizing the rap community for being too homophobic,¹¹⁰ did so again by discussing gay issues in a hardcore rap song:

*Down low you / like the dudes / we don't care none
Stop creepin' / stop sneakin' / come out in the sun
Get loud 'n' / get proud / go have yo' fun
Over half / do the math / you got to be safe, son
A d-ck'll / kill ya quick / as a double barrel shotgun*

Fellow rapper Eminem took a distinctly different approach with *Go Kill Yourself*, an abrasive social critique that tackled a wide variety of self-destructive behavior, including drug abuse, gang violence, reckless driving, and even overeating.

For this song, Eminem and frequent collaborator Dr. Dre reprised their roles from their 1999 song *Guilty Conscience*, a modern morality play in which the two rappers portrayed the aspects of good and evil in a person's mind while making a decision. In *Guilty Conscience*,

Eminem's character, Slim Shady, encouraged one man to rob a liquor store, another to rape an underage girl, and another to murder a cheating wife and her lover, while Dre acted as the voice of reason.¹¹¹

In *Go Kill Yourself*, Shady turns his malice toward people who do things they know are bad for them, cheering them on as they endanger their own lives:

*Don't slow down, muthaf-ckin' speed up (yeah)
I'mma pop some corn and watch with my feet up
You on the news (ha ha) turn that f-ckin' TV up
What they scraped off the street won't fill a f-ckin'
teacup*

...

*DD: Stop frontin' like you better than everybody else
MM: Nah, keep doin' what you're doin' 'n' go kill
yourself*

At one point, the song warns of the dangers of assuming that sexual partners tell the truth or that they are free of disease because they appear healthy:

*What's that AIDS? Naw, it's just a cough
Now get your a-- over here and get me off
I'm straight, white, and twenty b-tch, I don't got AIDS
DD: Hate to break it to you honey but ya just got
played*

The song specifically mentions the Three Month Rule twice, once when Eminem used a campy, effeminate tone to talk about casual homosexual sex in bathhouses:

*Mmm look at that man / he's hot for me
F-ck the Three Month Rule / that's not for me
Ooh I like that / come here my little buttercup
Ours bodies are beautiful / why would we want to
cover up*

As well as in a bridge by Dr. Dre:

*F-ck the po-po / the five-o
Got to go fo' / the nine-o
If you don't slow / down yo' roll
It's the end o' / yo' line bro*

...

*You keep doin' what you're doin' you gonna kill
yourself*

Eminem included just as many references to the movement in the accompanying music video as in the song itself, making frequent use of traffic signs as well as dressing both as Gaga and one of her skeleton backup dancers. The icing on the cake, however, was the album cover for the *Go Kill Yourself* single, which used the same holographic discs to create a direct parody of Gaga's album:

Illustration: Eminem's *Go Kill Yourself* album cover



Eminem already had a history of discussing unusual topics in his music. Whereas most rap songs talked about money, sex, crime, and street drugs, Eminem became the best-selling artist of the previous decade¹¹² rapping about his mother, prescription pain medication, and the challenges of being a single dad. Even so, *Go Kill Yourself* drew fire

from many groups who claimed it promoted discrimination and risky behavior, even suicide. Longtime friend Elton John¹¹³ came to Eminem's defense in an interview, as he had several times before when the young rapper had been accused of homophobic lyrics:¹¹⁴

Honestly I'd be surprised if anyone complaining has actually listened to the song. He says hateful words, yes, but he's playing a character, and just like his previous "feud" with Lady Gaga, the sentiment is hardly genuine.¹¹⁵

It's a bit of theatre to draw attention to some very hard truths and make certain people very angry. Which, as you can see, he has done quite remarkably. If this song makes someone mad enough to be more careful just to prove Eminem wrong, then I would say they've both come out ahead quite nicely, wouldn't you agree?

MOVING BEYOND MUSIC

Gaga's message and the Three Month Rule quickly spread beyond the music industry as celebrities of all kinds joined the movement. Professional athletes and actors alike recorded short videos supporting the cause and shared them on *SlowDownProject.com*, a concept which saw great success three years earlier at *ItGetsBetter.com*, a project aimed at preventing suicide among LGBT youth. Several of these videos were later adapted to 30-second spots and aired as PSAs on network television, but evidence of the movement appeared on the silver screen as well.

Independent filmmaker Tolomeo Costa won an Oscar for Best Documentary Feature at the 87th Annual Academy Awards for *Romeo*, a film about Andre Rymer, a promiscuous man who did not learn he had HIV until he was diagnosed with an advanced stage of AIDS. By going through his meticulously kept diary, Rymer compiled a list

of nearly a thousand Chicago-area women with whom he had sex, mostly unprotected, during the previous decade.

The film chronicles the aftermath of his indiscretions as he attempts to contact everyone he may have infected. While sifting through the shattered lives of his former lovers, Rymer visits dozens of sick women and grief-stricken families of those who had already died, as well as two children he did not know he had fathered. Rymer himself died painfully before he could complete the list, prompting the film crew to continue the grim task. Costa said he got the idea for the film from Faith Hill's song *Beautiful Stranger* as well as the story of Gaëtan Dugas (aka "Patient Zero"), the handsome flight attendant who allegedly jumpstarted the AIDS epidemic in the United States by sleeping with thousands of men across the country.¹¹⁶

On a lighter note, two mainstream romantic comedies with plots revolving around the Three Month Rule were box office hits that same year. *Waiting for Winifred* showed ladies' man Troy (Ryan Gosling) meeting his match in Winifred (Mila Kunis), who followed the Rule and challenged him to do the same. The movie followed Troy's misadventures as he narrowly overcame a string of temptations before finally winning over the woman of his dreams. *Ninety Days of Crazy* starred Mindy Kaling and James Franco as two friends who began dating and also chose to delay their physical relationship. Over the next few months, they got to know each other better without the complications of sex, fell in love, broke up, got back together, and ultimately decided to get married before ever sharing a bed.

Perhaps even more influential than their performances on-screen, though, was evidence of the movement in

celebrities' lives outside the studio. Several were spotted wearing "Keep Sex Beautiful" T-shirts, the product of a related campaign inspired by Gaga's words at her Los Angeles press conference. That paled in comparison, however, to how many wore gray silicone gel wristbands with "SLOW DOWN" stamped on them, similar to the white-and-red bands she designed in 2011 to raise funds for the victims of a major earthquake and tsunami in Japan.¹¹⁷ For a time it became difficult to spot an athlete or entertainer who didn't sport one of these bands, which were obtained by attending a Lady Gaga concert or donating five dollars to the Slow Down Project.

Hollywood power couples also started following the waiting trend themselves. When one starlet was asked by a gossip magazine how her new boyfriend was in bed, she replied, "How would I know? We've only been together for two months. All I know now is that he is a very good kisser." Several celebrities went even further, publicly declaring their celibacy, just as Gaga had done in 2010.¹¹⁸ Finding out that single musicians and actors weren't having sex was encouraging, particularly to young women. However, to young men, that was nothing compared to hearing the same message from the professional athletes they idolized.

After all, the history of American sports was paved by a long line of celebrated womanizers that stretched back to Babe Ruth,¹¹⁹ with NBA legends like Wilt Chamberlain¹²⁰ and Magic Johnson¹²¹ reportedly having several hundred different sexual partners a year in their heyday. This level of debauchery was to be expected in a sport where hordes of women threw themselves at athletes outside the stadium

after every game, some even following them around the country just for a chance to bed them.¹²²

However, seeing these hyper-masculine modern-day gladiators lay down their swords, so to speak, was particularly influential to the group most at risk for HIV: young urban black men. Studies found that up to half of black basketball players at inner-city high schools believed they had a future in the NBA.¹²³ With the sport as fundamental to hip-hop culture as music, fans already attempted to emulate their heroes' larger-than-life personas by wearing their jerseys, making following in their footsteps of sexual restraint a welcome example of how the stars' influence could lead to positive changes.

The Three Month Rule eventually became safe to joke about and spread to the world of comedy as well. David Letterman presented the "Top Ten Things That Need a Three Month Rule" as a segment on his *Late Show*, and the topic became a staple for standup comedians. Below is an excerpt from Marshall Wright's 2015 HBO special, *Halfway Indecent*:

Hey, remember when you could just meet a girl, and if she liked you, you could sleep with her? You know, way back when, like, oh, I don't know, f-cking three years ago?

I could strangle that Lady Gaga.

But seriously, I get it, and it's not her fault. It's my fault. Well, not just me, but people like me, and there's a lot of us. You know the type. The type of people who have penises.

Back before I looked like, you know, this, if I met some smokin' hottie on Tuesday, you think I told her I just hooked up with my skanky ex Monday night? Hell no.

These days, it doesn't matter. This whole "three month" thing is like the Brady Bill for vajayjay. Come on, three months? I can get a gun in ten days, but I have to wait ninety to get some nookie?

And everybody's doing it now. It's just like an amusement park. All the good rides have lines.

Except the wait is three freaking months and there's no one to talk to because you're the only one in line. Or you better be. Right? You better be.

The first month is OK, you're still getting to know each other, and the last month is like thirty Christmas Eves in a row, and you revert to your 8-year-old self, sittin' there in your pee-jays asking her, "Couldn't we open just one present?"

But that second month, whew, that's rough. You start looking around... Hey, are all the lines this long?

Trust me guys, wait it out. You do not want to shop around. Have you seen the rides with no lines? There is a reason, guys. Scary. No thank you, sir. I am not going in there. Might not make it out alive, you know?

It's just like airport security. It's a giant pain in the ass, and we don't want to go through it, but we sure as f-ck don't want to risk our lives with anyone else who didn't go through it.

Perhaps the most obscure reference to the Three Month Rule from a public figure was made in 2015 by Justice Ruth Bader Ginsburg. In the Supreme Court's majority opinion about a decision that changed the way appeals from prisoners on death row are handled, she wrote:

If society's general rule is to wait a minimum of three months before engaging in the sort of activity that can create a life, the least we can do is honor that same period before we, as a society, take a life.

Writer Sheila Futrell called the wording a “defining moment for the Rule” in a *New York Times* opinion piece:

When an octogenarian who has led the cloistered lifestyle of a Supreme Court Justice for over 20 years quotes an idea put forth by Lady Gaga, it is safe to say the Three Month Rule has graduated past a pop culture trend to become a permanent part of the fabric of our society.

THE BENEFITS OF SLOWING DOWN

She was right: The Rule had become part of our culture.

The best measure of the success of Gaga’s movement, though, isn’t a list of which celebrities helped popularize it. The best measure is not even the degree to which it achieved its intended purpose, i.e., preventing the spread of HIV. No, the best measure is the evidence that illustrates all the diverse ways our society, almost three decades later, has improved as a result of her effort.

LESS CASUAL SEX

The behavioral change that can be attributed most directly to Gaga’s campaign is the decline of casual sex. Researchers noted that a migration toward the Three Month Rule, in both practice and public opinion, began in late 2012 – right after the Slow Down Project started – and continued to gain momentum before leveling off in 2022.

Of course, not everyone lives by the Rule, and those who do don’t always follow it to the letter. Today, the average time Americans wait before having sex with a new partner is closer to six weeks than three months, a monumental increase compared to 30 years ago. The Third Date Rule is

essentially extinct. To the generation reaching sexual maturity today, the older rule is a relic from a bygone era; they have only heard of the Three Month Rule.

This single shift in behavior has cascaded into a variety of other changes over the years, each with their own societal benefits.

To begin, delaying intimacy longer meant that shorter relationships, namely those that did not last past the waiting period, never resulted in sex. This had a pronounced impact on America's youth, where the movement first took hold. In 2009, a few years before the Three Month Rule was introduced, American high school students typically lost their virginity by their junior year,¹²⁴ and most waited less than three months to have sex for the first time.¹²⁵ But this has changed. Whereas the average age of first intercourse used to be 17,¹²⁶ by 2028 it had increased to 19.

Two years do not make a large difference later in life; 44-year-olds are essentially identical to 46-year-olds. However, 17 is a world apart from 19 in terms of maturity, personal growth, and responsibility. At 17, most Americans spend their days socializing with the same group of people with whom they grew up and, in most states, have only recently become eligible for a driver's license. By age 19, though, the vast majority have graduated from high school¹²⁷ and many have left the nest, gotten jobs, or gone to college. Sex has generally become a part of adult life, not adolescence.

This shift is most significant because having sex in high school was the societal norm just a few decades ago.¹²⁸ Now, losing one's virginity before graduation is no longer

an expected rite of passage. Today's teens report widespread social support for abstinence, which helps more of them to make decisions about sex based on their own values rather than peer pressure – and most are choosing to wait.¹²⁹

With more people of all ages following the Three Month Rule, there are also fewer flings and one-night stands driving up each person's total number of sexual partners. Some things haven't changed – men still inflate their numbers while women still leave a few out¹³⁰ – but in 2038, all age groups reported, on average, nearly two fewer total lifetime sexual partners than similar groups did in 2008.

LOWER STD RATES

The great news is that the fewer partners people have, the lower their chances of contracting and spreading sexually transmitted diseases. Each reduction of one partner doesn't just make those chances a little smaller, but exponentially smaller. And when everyone reduced those chances at the same time, the cumulative effect on disease was enormous.

Consider a world in which everyone has sex with only one person in their lifetime. In this scenario, sexually transmitted diseases have no way of spreading. On the other hand, if everyone has sex with eight different partners in their lifetime, and each of those has eight total partners themselves, and each of *those* has eight partners... the numbers add up quickly. People who have frequent casual sex and rack up tallies in the double or triple digits can be linked to millions of sources of infection.

Before the Three Month Rule, the number of new annual cases of HIV in America had remained constant for 20 years. However, when all those eights became sixes and the fives became threes across the country, the spread of HIV finally started tapering off.

More good news: Infection rates are down across the board. The Three Month Rule has helped thwart all STDs, particularly those that are curable and show symptoms earlier than HIV, like gonorrhea and syphilis. In fact, syphilis, which had been growing explosively among MSM after nearly being eliminated in the United States in 2000,¹³¹ is now back to all-time lows and experts are again predicting its eventual eradication.¹³²

Each notch eliminated from the bedpost avoids another source of new infection, but that is only part of the story. Following the Three Month Rule still helps prevent the spread of disease, even when couples eventually do have sex. This is because waiting lengthens the window during which prospective partners can discuss their sexual relationship before beginning it, which has several positive side effects.

For instance, waiting improves STD testing. People get tested more often today than they did 30 years ago, but more important than the frequency is the timing. Now that people expect a delay before having sex, getting tested and sharing the results has become a normal thing to do during the wait. Consequently, the number of people who get tested (and wait for the results) before having sex with a new partner has risen significantly.

This is important because testing is finally being used as a preventive measure. Over the past 30 years, getting tested

for STDs has become something people frequently do before having sex with a new partner rather than only after a scare from risky behavior. This shift in perception has taken the stigma out of getting tested. What used to be embarrassing is now just a regular part of a responsible lifestyle. Young people today share almost every detail of their lives with their social networks, and they hesitate no more to use Foursquare¹³³ to publicly check in at a testing center than they would at a restaurant. Even for those who don't get tested, waiting still helps by making it more likely that prior infections will make themselves known through symptoms, prompting treatment before the carrier unknowingly spreads it to a new partner.

Another effect waiting had on testing was that it spurred innovation in the medical industry. As one financial analyst correctly predicted in 2014:

The Three Month Rule is effectively a global sex embargo. This will increase demand for better testing procedures, particularly among those who are willing to pay a premium to try to convince someone not to wait the full three months.

Gaga modeled the Rule after CDC testing guidelines, which were based on the most common type of HIV testing at the time: antibody tests.¹³⁴ However, other testing methods were available, even back then. Nucleic acid-based tests, for example, could detect HIV in just over a week after infection, much earlier than antibody tests,¹³⁵ but they were much more expensive. To stretch their dollars, blood banks would screen donations by mixing samples from several people to perform a nucleic acid test on the batch,¹³⁶ but the method was prohibitively expensive for most individuals.¹³⁷ Since then, competition and advances in

technology have driven down the price of this faster method, and it has already overtaken antibody testing in the United States and Europe.

LOWER UNINTENDED PREGNANCY RATES

Another benefit of waiting is that it gives couples more time to discuss contraception. Research has shown that the more non-sexual dating activities teenagers engage in, the more likely they are to discuss birth control before having sex¹³⁸ and use it consistently thereafter.¹³⁹ Furthermore, research has also shown that those who wait longer to begin having sex are also more likely to use contraception.¹⁴⁰

This has had a dramatic effect on lowering pregnancy rates, particularly among teens. After all, teens who are sexually active but do not use birth control have about a 90 percent chance of becoming pregnant within a year.¹⁴¹ The level of condom use among American teens, which had backslid in the early 2000s,¹⁴² is now much higher, and overall contraceptive use is similar to that of European teens. As would be expected, so is the rate of teen pregnancy.¹⁴³

As unintended pregnancies were avoided, so were the consequences that came with them, like miscarriage, adoption, or keeping unplanned children, each of which could have harmful effects on women and their families.¹⁴⁴ This says nothing, of course, of the most controversial outcome: abortion. Fortunately, abortion rates in America have plummeted even farther than pregnancy rates,¹⁴⁵ and are now among the lowest in the world.

Many still believe that a single terminated pregnancy is one too many, but even hardline abortion opponents have celebrated this improvement. While the pro-life/pro-choice debate raged on at an impasse, the Three Month Rule quietly made progress with the solution both sides agree is best: avoiding unintended pregnancies in the first place.

LADY GAGA, CRIME FIGHTER

So how did Lady Gaga end up fighting crime?

In 2001, two economists published research that noted how crime began to fall in America 18 years after *Roe v. Wade*, and even earlier in the five states that allowed abortion before the landmark decision. In addition, states with higher abortion rates subsequently experienced higher drops in crime. By their calculations, the economists estimated that legalized abortion was responsible for as much as half of the reduction in crime in the 1990s.¹⁴⁶ This research gained new attention a few years later when one of the economists co-authored the bestseller *Freakonomics*, which devoted an entire chapter to explaining the recent drop in crime.¹⁴⁷ The concept was a new twist on the old idea¹⁴⁸ that unplanned children are more likely to grow up in unfavorable conditions and become delinquents.

Liberals have used the study to support abortion rights, while conservatives¹⁴⁹ have tried to discredit it, attributing the lower crime rates to other factors instead, such as the death penalty and changes in law enforcement,¹⁵⁰ or even the elimination of lead from paint and gasoline.¹⁵¹ As is so often the case, the truth appears to be somewhere in the middle.

Starting in 2029, crime in America started another sustained dive, the shape and length of which almost perfectly parallels the decline in unintended births that began 16 years earlier. If the connection between crime and unwanted children were as powerful as the two economists theorized, the drop should have been twice as large, but to this day, academics have a hard time attributing the shift to anything but Gaga's movement.

THE BIRTH RATE PARADOX

Surprisingly, despite this decline in overall pregnancy, the birth rate in America is actually higher now than it was before the Slow Down Project. However, this apparent paradox is easily explained.

Over the years, the Three Month Rule helped prevent millions of unintended pregnancies, but along the way, an interesting thing happened. For every ten women who avoided becoming pregnant accidentally, about eight others decided to become pregnant on purpose. On the surface, this would appear to be a net decrease, but between abortion and miscarriages, less than half of those unintended pregnancies would have resulted in a birth anyway.¹⁵² On the other hand, the vast majority of women who get pregnant on purpose end up giving birth, which shows how we gained a net increase in children despite a lower overall pregnancy rate.¹⁵³

Before the Slow Down Project, half of all pregnancies in the United States were accidental.¹⁵⁴ Today, two-thirds are planned, making America's intended pregnancy ratio and fertility rate the envy of the modern world,¹⁵⁵ in which many industrialized countries are shrinking.¹⁵⁶ Not too

long ago, though, the nation's population statistics weren't looking so healthy.

Birth rates in America had sustained several steady declines since the 1950s,¹⁵⁷ to the point where experts worried about having enough young people to keep the economy going with a large elderly population straining Medicare and Social Security.¹⁵⁸ In fact, Americans had only produced enough offspring to maintain a constant population in two of the 30 years between 1971 and 2011. The rest of the time, only immigration kept the country from shrinking.¹⁵⁹

Right before the Three Month Rule was introduced, the birth rate was still dropping.¹⁶⁰ Then along came Gaga telling everyone to slow down, which demographers warned would mean disaster for the long-term future of the country. They needn't have worried, because around the same time, the country also saw a surge in marriage. More married people means more children: Married women get pregnant more often than single women and when they do, they are almost ten times as likely to have a child than an abortion.¹⁶¹

However, people didn't just start getting married more often. They also started marrying younger, staying together longer, having sex more frequently, and divorcing less frequently, and every one of these trends took a sharp turn right after the Slow Down Project.

Society had long been moving away from marriage and the traditional nuclear family.¹⁶² What happened? Did Lady Gaga somehow convince people to get married and have babies? According to the experts, the answer is yes.

LADY APHRODITE

Therapists explain this phenomenon by pointing out that the Three Month Rule gives couples the time to form bonds and establish communication within a relationship before adding the complications of sex, leading to stronger relationships. Social psychologists, on the other hand, claim that delaying gratification fosters an array of mature interpersonal habits and ultimately makes people appreciate their partners more.

Behavioral economists have yet another, less romantic explanation. According to their theories, people haven't changed at all – only the “market” has. The waiting period has increased the transaction cost for finding a new partner. As emotional consumers, we are keenly aware of this price hike, so we are now more selective when evaluating prospective mates and therefore make better decisions.¹⁶³

Conventional wisdom, however, doesn't need a doctoral dissertation to know that the best things in life are worth waiting for. Or that when we put more work into something, we value it more. Or even that getting to know someone before having sex just might lead to a more successful relationship.

Whatever the reasons actually are, they have worked. And the generations who have grown up with the Three Month Rule have reaped the largest rewards. As stated earlier, 30 years ago most American high school students rushed into sex. However, they weren't happy about it. In 2010, most young people who had sex before the age of 20 wished they had waited longer.¹⁶⁴

Compare that to today, when young people choose to become sexually active much later. Most remain virgins throughout high school, and almost four in ten wait until their twenties. When they finally do have sex, it is typically with someone they have been dating for several months, if not longer.

Delaying intercourse has solved many problems for young people. The regret is almost gone. In a recent survey, fewer than one in five said they wished they had waited longer.¹⁶⁵ Their first sexual experiences are better,¹⁶⁶ and because they are safer when they finally do have sex,¹⁶⁷ they also suffer fewer adverse consequences. Instead of rushing to have sex right away, they make sex part of a committed romantic relationship, which is more satisfying, both physically and emotionally.¹⁶⁸

An entire generation rediscovered the simple joy of sharing sex only with partners they had gotten to know well before jumping into bed. The Three Month Rule ultimately heralded a wave of more successful relationships and more positive attitudes toward sex, which in turn has led to what may be the most counterintuitive change yet.

SLOW DOWN: SEX AHEAD

Gaga may have told us to slow down, but we're having more sex than ever.

Contrary to how single life is glamorized in movies and TV shows, research has long shown that married people have more sex¹⁶⁹ and more satisfying sex¹⁷⁰ than their single counterparts. Married people are also happier in general,¹⁷¹ although, as with most relationships observed in research, the direction of causality is not clear. In other words, this

could mean that marriage makes people happier, or that happy people get and stay married, or a bit of both.¹⁷²

A satisfying love life is one of the top predictors of happiness,¹⁷³ and people have indeed become markedly happier recently. But the smiles on their faces are not just from spending more time in the bedroom. Some have joked that the government added anti-depressants to the water supply, but the reality is that almost any way you slice the data, Americans are better off today than they were 30 years ago.

The Slow Down Project convinced us to become a little more responsible. This caused several predictable effects, like lower rates of disease and abortion, as well as some that were harder to foresee, such as people having more sex and committing less crime. However, each of these outcomes were just the first dominos in longer chains of other improvements.

For example, convincing teens to wait longer before having sex led to fewer of them becoming pregnant. This, in turn, improved the declining high school graduation rate,¹⁷⁴ since teen pregnancy was one of the top reasons people quit without a diploma.¹⁷⁵ Dropouts use welfare and public health services more than others and also have higher rates of drug abuse and crime,¹⁷⁶ so reducing their numbers also reduced their staggering drain on society.

Beyond that, teens who abstain do better in high school than their sexually active classmates (even when not counting those who become pregnant) and are twice as likely to complete college.¹⁷⁷ A degree translates into greater lifetime earnings¹⁷⁸ and all the advantages that

come with them, such as better health (both of the individual as well as the entire economy).

For people of all ages, waiting led to more stable romantic partnerships, which has been linked to lower levels of depression, substance abuse, and domestic violence. And more of those relationships resulted in marriage, which is associated with lower health risks, longer life expectancy, and larger salaries, even for the same jobs.¹⁷⁹

All of these changes are interrelated in a web too complex to untangle, making it impossible to attribute everything to Lady Gaga. Nevertheless, they have all improved recently and, most significantly, they all began improving at about the same time: shortly after the Slow Down Project. It is also not just an American phenomenon; all other developed nations have seen similar trends over the same period. The only unifying factor is a shift toward more responsible sexual behavior, which all started with the Three Month Rule.

Thirty years ago, one woman asked us to slow down and exercise a little self-restraint. Today, we are happier and healthier for it. Marriage and relationship satisfaction are up, crime and disease are down, and these numbers just keep getting better.

Thanks to Lady Gaga, our future looks bright.

AFTERWORD: WHY IT WORKED

After the Slow Down Project, life improved in so many ways that it almost seemed too good to be true. That anyone could convince people to become more sexually responsible was hard enough to believe, but that the one to do so would be a young pop singer with a penchant for outlandish outfits was downright surreal. To top it off, the extent to which her work ultimately affected American society, and the world, was nearly incomprehensible. It was an incredible feat to be sure, but in retrospect the reasons that Gaga's efforts made such an impact are actually quite simple.

After years of failed strategies, sexual education was in desperate need of a new message. Gaga provided one in the form of an empowering movement, which she made successful by using her considerable influence as a media superstar. This movement convinced many people to change their habits a little, and all those small changes added up to make much larger differences, particularly when it came to HIV. The remainder of the book discusses each of these reasons in detail.

REASON #1: SEX ED NEEDED A NEW MESSAGE

The history of sex education in America is filled with propaganda and misinformation. At almost every turn, well-intentioned people used colorful rhetoric to dramatically overstate the dangers of sex. John Todd's *Student's Manual*, first published in 1835, told young men that masturbation could drive them insane or cause sudden death. The topic was so distasteful that the author

said he could not write about it in English, so he switched to Latin instead.¹⁸⁰

Later, the 1914 silent film *Damaged Goods* told the story of a young lawyer who contracts syphilis from a prostitute the night before his wedding. Afterward, he passes it on to his wife and unborn baby and then, distraught with grief, drowns himself.¹⁸¹

With the amount of media available today, it is difficult to appreciate how influential a single film could be, but this one shaped the perceptions of an entire generation. *Damaged Goods* made millions, inspiring copycats to make similar films for years thereafter, and the play upon which the film was based was hailed as “unquestionably the most widely discussed play of a decade” and “the greatest contribution ever made by the stage to the cause of humanity.”¹⁸²

Sex education eventually became more reasonable than these early examples, but it was still fundamentally flawed. Before the Slow Down Project, it consisted of two distinctly different messages: “Safe Sex” and “Abstinence-Only.”

The Safe Sex message was born in the 1980s, a reaction to the new threat of AIDS. The original idea, boiled down, was:

Sex can cause pregnancy and STDs. Condoms are the only contraceptive that can prevent disease, but are not 100% reliable. A second method of birth control is recommended.

Safe Sex, which was later rebranded as comprehensive sex education, was usually delivered with other information

about STDs, the dangers of teen pregnancy, and how to resist peer pressure.¹⁸³

The basic tenets of the other message, Abstinence-Only (or Abstinence-Only-Until-Marriage), had existed in religion for thousands of years, but only rose to prominence in public education after 1996, when the federal government began funding Abstinence-Only programs.¹⁸⁴ The main idea was:

*Sex outside marriage is wrong and harmful. Abstinence is the only certain way to avoid pregnancy and STDs. People should not have sex until they are married and supporting themselves.*¹⁸⁵

Schools who took funding for Abstinence-Only programs had to follow very strict guidelines and were forbidden to even discuss contraceptive methods except to emphasize their failure rates.¹⁸⁶ This meant that in the early 2000s, American students received one of these two very different messages.¹⁸⁷ In theory, either strategy would have worked; unfortunately, neither was good enough in practice.

NO SUCH THING AS SAFE SEX

The simplest form of the argument for Safe Sex was:

No matter how much we discourage teens from having sex, some will have sex anyway. Therefore, for their own good, we should teach them how to do it as safely as possible.

This approach was strongly supported by the scientific community, which reasoned that it would benefit the greatest number, since most teens do indeed have sex¹⁸⁸ and almost no one waits for marriage.¹⁸⁹

However, the weaknesses of Safe Sex lay in its origin. It was, at its heart, a utilitarian reaction to a public health crisis. As a result, the approach measured its goals of disease and pregnancy prevention in cold, clinical terms, placing less importance on the overall well-being of the individual, such as the emotional impact on young people who have sex before they are ready.

It also exaggerated certain dangers, while not emphasizing others enough.¹⁹⁰ In a 2005 study of fears among students, AIDS was reported as the top fear by a wide margin among youths between the ages of 11 and 14,¹⁹¹ despite there being only a .0003 percent likelihood of them catching HIV that year, based on their age.¹⁹² AIDS was also the top fear among high school students, consuming attention which could have been spent on far more likely dangers. Meanwhile, things they should have been more worried about – like getting in a car accident, taking dangerous drugs, or getting pregnant – didn't even make the list of their top ten fears.¹⁹³

Worst of all, the Safe Sex approach gave many young people a false sense of confidence. Programs taught students that proper condom usage nearly eliminates the risk of HIV, which is true.¹⁹⁴ They also taught that condoms are 97 percent effective against pregnancy.¹⁹⁵ This is also true: On average, over a 12-month period, fewer than 3 percent of women using condoms properly will become pregnant. However, in their zeal to promote condom usage, they failed to mention that, in practice, people often do not use them correctly and consistently enough to gain these benefits.

For preventing pregnancy, condoms actually have a yearly failure rate of 15 percent in the United States. Among

teenage females who live with their boyfriends, that failure rate is a whopping 47 percent.¹⁹⁶ This should not have been surprising, considering that essentially all Safe Sex programs talked about condoms, but only half demonstrated how to use them.¹⁹⁷ This helps explain why, in one major poll, eight in ten teens said they knew everything they needed to avoid an unplanned pregnancy, yet half said they knew nothing or little about how to use condoms.¹⁹⁸

Making matters worse, condom usage peaked among students in tenth grade, then dropped significantly with each passing year in high school.¹⁹⁹ This change could be attributed to a nearly parallel increase in other birth control methods between those grade levels.²⁰⁰ Regrettably, despite recommendations to use multiple methods of birth control and to always use condoms to help prevent STDs, when people start using more effective birth control methods, they tend to stop using condoms.²⁰¹ This phenomenon leads to its own set of problems when one partner places undeserved trust in the other's claims of being monogamous or disease-free. Condoms, the only type of contraceptive that helps prevent STDs,²⁰² were the lynchpin of the Safe Sex strategy, but they were not getting the job done.

The scientific community nevertheless called Safe Sex a successful strategy, and technically it was. A very deep body of research found comprehensive sex education to be effective at delaying the start of intercourse, reducing the number of partners, increasing contraceptive use, reducing teen pregnancy, and reducing the spread of STDs.²⁰³ Even a study requested by conservative lawmakers to expose the

weaknesses of comprehensive programs grudgingly found them to be generally effective.²⁰⁴

Similarly, some anti-drug campaigns have been “successful,” too, in that they measurably reduced drug-related activity. But it’s not as if all drug-related problems in America have been solved, and neither had the problems stemming from sex. One in four teenage girls had an STD,²⁰⁵ and America had the highest level of teen pregnancy in the developed world.²⁰⁶ This is not the kind of “success” we needed.

ABSTINENCE-ONLY-IN-THEORY

Social conservatives looked at those statistics and thought they could do better. To examine their philosophy, it needs to be split into two separate ideas: “abstinence” and “Abstinence-Only.”

The argument for abstinence:

Sex can cause pregnancy and STDs. Only abstinence is guaranteed to prevent both. Therefore, for their own good, we should encourage teens to be abstinent.

Abstinence-Only added the following ideas:

Sex outside marriage is wrong and dangerous. Furthermore, we should not teach teens about contraceptives, since that would encourage them to have sex.

In theory, Abstinence-Only is even better than Safe Sex. First of all, supporters were right: There is no such thing as “safe sex.” Every method of birth control short of a total hysterectomy has a chance of failure, and condoms, while very effective against disease when used perfectly every time,²⁰⁷ have an alarming failure rate in practice.²⁰⁸

Furthermore, Abstinence-Only focused more on the overall well-being of the individual, including emotional health, not just what could be measured in a blood sample. Proponents argued that having sex too soon led to regret and guilt, and they were right again.²⁰⁹ They also knew that awareness did not magically solve all problems. Even with education, adolescents often feel invulnerable, misjudge the riskiness of their sexual behavior, and make poor choices.²¹⁰

Abstinence-Only advocates felt that Safe Sex was an inappropriate strategy for young people, who still need more guidance. To them, encouraging abstinence and all of its associated benefits was a better solution.

It could have been. Promoting abstinence could have been successful. The scientific evidence supporting abstinence itself was solid. It was the “-Only” part that was the problem.

First, it taught that having sex before marriage is wrong, an idea with which few Americans agreed anymore.²¹¹ This watered down what could have been an effective message by presenting an unpopular opinion as a fact, which led students to question the rest of the strategy.

However, the fatal flaw behind Abstinence-Only was that it avoided teaching about contraceptives on the mistaken belief that doing so would encourage students to have sex. Many adults thought it would, but young people did not agree.²¹² More importantly, overwhelming evidence showed that Safe Sex education did not make students any more likely to have sex. In a study of 32 comprehensive programs, not one sped up the initiation of sex; in fact, about half of them delayed it.²¹³ This meant that, with the

best of intentions, Abstinence-Only withheld vital information about protective practices from young people, most of whom were sexually active before they left high school.²¹⁴

Even this drawback could have been offset if Abstinence-Only programs persuaded enough young people to be abstinent. Unfortunately, they didn't.

Studies showing that Abstinence-Only had any effect at all on behavior were few and far between,²¹⁵ and most of them ignored the most rudimentary principles of scientific research.²¹⁶ One report initially claimed that an Abstinence-Only approach could reduce sexual activity by as much as 80 percent among eighth-graders.²¹⁷ Later, more rigorous research showed it had only a short-term effect on attitudes and no effect on behavior,²¹⁸ yet the first study was still widely cited by Abstinence-Only advocates years after it had been debunked.

It's not as though Safe Sex programs were perfect; several had already been found to be equally ineffective.²¹⁹ On the other hand, mountains of evidence argued that Abstinence-Only made no impact whatsoever on behavior, and since it came at the expense of comprehensive sex education, was actually harmful.²²⁰ A study of 13 different Abstinence-Only programs found them to have no effect on sexual initiation, unprotected sex, number of partners, or condom use.²²¹ Another studied 56 programs, eight of which were abstinence-based, and came to similar conclusions.²²²

With all this research finding "no impact," a detail often overlooked is that the principles behind Abstinence-Only did, in fact, persuade millions of people to abstain. The underlying ideas had been around for thousands of years

and were promoted by parents and religious leaders, who convinced many people to follow them. In 2010, when abstinent teens were asked why they had not yet had sex, the most popular answer was that doing so would be against their religion or morals.²²³

One of the main reasons Abstinence-Only education didn't have a measurable effect is that its values had already been accepted by the people most receptive to the message before Abstinence-Only programs entered the picture. Such programs made no impact because many people already followed the Abstinence-Only approach and the rest merely remained unpersuaded to join them.²²⁴

Abstinence worked. But Abstinence-Only education did not.

As a result, it was almost universally denounced by the scientific community. The American Medical Association,²²⁵ American Psychological Association,²²⁶ and a host of other professional organizations²²⁷ opposed Abstinence-Only. When Congress requested a scientific evaluation of the Abstinence-Only programs it was funding, even the ones handpicked for quality were found to have no effect on abstinence.²²⁸

At first, every state except California took federal funding for Abstinence-Only programs.²²⁹ However, as more strings were attached and the effectiveness of the approach was questioned, half of them later turned the money down.²³⁰ Even conservative states came to negative conclusions through their own independent analyses. In 2004, the Kansas Department of Health found “no changes noted for participants’ actual or intended behavior.”²³¹ The next year, a Texas Department of State Health Services

report also found no effect, and the director of the study said: “These programs seem to be much more concerned about politics than kids.”²³²

MUDSLINGING AND CHERRY-PICKING

He may have touched upon the primary reason for the widespread failure of Abstinence-Only education: Its principles were not written by scientists, or even educators. They were written by politicians, who strictly codified what Abstinence-Only could and couldn't teach.²³³

Some of the ideas they forced educators to present were true, such as teaching that abstinence is the only certain way to avoid pregnancy and STDs.²³⁴ Others were inaccurate, like teaching that our society thinks sex between unmarried people is wrong, when most think otherwise.²³⁵ Still others were blatant falsehoods, like telling students that sex outside of marriage will probably cause psychological and physical damage.²³⁶

Other than these principles, standards were lax, and a cottage industry sprung up to take advantage of the \$1.5 billion in federal funds made available to any organization that adhered to the guidelines.²³⁷ As a result, many Abstinence-Only programs were riddled with inaccuracies, spreading false information about contraceptives and presenting religious beliefs as fact.²³⁸

This fueled a hostile debate that pitted liberals against conservatives, scientists against church leaders. Safe Sex advocates pointed to research that showed their approach worked better, but detractors said that just reflected the scientific community's secular bias against religion. Abstinence-Only was based on Christian values, which supporters felt was appropriate considering that four out of

five Americans are Christian.²³⁹ Opponents countered that religion had no place in public schools.

Both sides slung a lot of mud, and neither side knew much about the other. Conservatives denounced Safe Sex for ignoring their ideals. However, 95 percent of comprehensive programs promoted abstinence,²⁴⁰ and students consistently reported that, despite being taught about contraceptives, the main message was that they should not have sex.²⁴¹ On the other hand, liberals argued that Abstinence-Only was wasted on teens who were already sexually active, but that wasn't true either.²⁴² Others went so far as to accuse Abstinence-Only of violating human rights for endangering sexually active young people by withholding information they could use to protect themselves.²⁴³

It's hard to blame anyone for being confused since both camps distorted information to match their narrative. When criticizing the opposing side's educational materials, they zeroed in on the worst examples. Conservatives complained that one program included explicit sex tips that went beyond the information young people needed to stay safe and crossed over into more adult themes. Some excerpts:²⁴⁴

Showering together is a “green light” (no risk) activity.

Excuse (for not using a condom): “When I stop to put it on, I’ll lose my erection.”

Instructed Response: “Don’t worry, I’ll help you get it back.”

Most women need to have their clitoris (the arousal organ in their vulvas) touched, or indirectly [touched] in order to have an orgasm.”

On the other hand, liberals condemned one Abstinence-Only video²⁴⁵ aimed at middle school students for grossly exaggerating the dangers of sex:

Every time you have sex, it's like pulling the trigger. The only difference is, in Russian Roulette, you only have one in six chances of getting killed.

...

[Boy] "What if I have sex before marriage?"

[Man] "Well, I guess you'll just have to be prepared to die. And you'll probably take with you your spouse and one or more of your children."

However, neither of these examples are representative of typical Safe Sex or Abstinence-Only education. Opponents merely brought them up as scare tactics.

The chicanery got even worse when advocates from either camp cherry-picked a single study to support their worldview. Take, for example, the debate over the virginity pledge movement, which was popularized in 1993 by the Southern Baptist Church. One of the first major studies of virginity pledge programs found that participants delayed having sex, but when they did, they were less likely to get tested for STDs or use contraceptives.²⁴⁶ Later, another national study found that those who took pledges had just as much premarital sex as everyone else.²⁴⁷

Others looked at the skyrocketing rates of oral and anal sex among teens²⁴⁸ and blamed Abstinence-Only and the virginity pledge movement. Supporters of this theory said that, since those acts do not "count" as losing one's virginity, young people had found other ways to satisfy their hormonal urges while adhering to a warped interpretation of the pledge.²⁴⁹ One study found that pledgers were, in fact, substituting anal and oral sex for

traditional sex,²⁵⁰ which the first research team later confirmed.²⁵¹ Another research team found that anal sex was rare among virgins, and that they were no more likely to have it after Abstinence-Only was introduced.²⁵²

Amidst all the reports that pledges were meaningless, a different study showed that while public pledges indeed did not affect behavior, pledges made in private did.²⁵³ To top it off, a final study discovered that nearly all pledgers later denied ever having taken a pledge,²⁵⁴ which called into question all previous research.

As it stood, people on both sides could choose studies from any point in time to back any opinion they wanted to support. At the end of the day, nobody changed their minds about anything, and the debate raged on.

Since neither Safe Sex nor Abstinence-Only solved the problems of pregnancy and disease,²⁵⁵ which approach to support became largely a matter of ideology. Safe Sex looked at the entire population and accepted that many teens will inevitably have sex. Supporters called this practical; detractors called it defeatist. On the other hand, Abstinence-Only focused on the individual benefits of avoiding sex. Advocates said this promoted healthy values; opponents said it was dangerously delusional.

The American judicial system operates on the belief that it is better to let ten guilty go free than to punish one innocent person, a principle drawn from English law²⁵⁶ that dates back to the Biblical story of Sodom and Gomorrah.²⁵⁷ When choosing between Safe Sex and Abstinence-Only, a similar question arose: Should we help more people be a little safer, or should we steer the few we can convince to follow the only truly safe path?

Americans found themselves in a predicament: Nearly everyone thought teens should be told to be abstinent, at least throughout high school,²⁵⁸ but Abstinence-Only education was not convincing them to do so. One educator summed up the feelings of many:

We teach our kids ideals. We tell them not to do drugs, and most end up trying them, but I still want to teach them not to. We tell them not to have sex, and most of them try that too, but I don't just want to throw condoms at them.

I care about them, and I want what's best for them. This isn't about religion or my personal beliefs. I'm a science teacher and an atheist, and I know for a fact, from hard data, that most kids would be better off waiting.

Abstinence is an ideal, and maybe we can't reach it with everyone, but I can't look any parent in the eye and tell them that we shouldn't be promoting abstinence. We just have to figure out a better way to do it.

Just because the message isn't getting through doesn't mean we should give up. Look at something less controversial. We teach kids math, but low scores show that the message is not getting through. Nobody is saying we should stop teaching math. They are saying we should teach math better.

But how could we teach abstinence better?

AN UNEXPECTED ALLY

Many Abstinence-Only supporters felt animosity toward the scientific community. After all, every study with strict controls had found Abstinence-Only to have no effect or be harmful. Martha Kempner, spokeswoman for the Sexuality

Information and Education Council of the United States, said:

*Abstinence-only was an experiment and it failed.*²⁵⁹

Then, in 2010, a team of researchers at the University of Pennsylvania published a study that showed an abstinence-based approach to have a lasting, positive impact – the very first randomized, controlled study to do so – and the impact was substantial.²⁶⁰

The findings vindicated those who had felt all along that abstinence was the best route. Robert Rector, a research fellow at the Heritage Foundation who wrote the criteria for federal funding of abstinence programs, said:

*This takes away the main pillar of opposition to abstinence education...I've always known that abstinence programs have gotten a bad rap.*²⁶¹

Conservatives across the country rejoiced, but the idea that teaching abstinence could work was not news to them. More importantly, due to its scientific quality, the study also got the attention of many who were strong supporters of the Safe Sex approach. Sarah Brown, CEO of the National Campaign to Prevent Teen and Unplanned Pregnancy, called it “game-changing” in an interview, and said:

*For the first time, there is strong evidence that an abstinence-only intervention can help very young teens delay sex.*²⁶²

Even James Wagoner, president of Advocates for Youth and a regular critic of research that supported Abstinence-Only, praised the new study. One news article said:

Even Wagoner, who charges that studies by conservative groups like the Heritage Foundation advocating abstinence-only programs are akin to having “Santa Claus write something from the North Pole,” found the federal study compelling. “This is a legitimate study from a legitimate researcher,” he said. “So those of us who believe in legitimate research have to pay attention.”²⁶³

Valerie Huber, executive director of the National Abstinence Education Association, reacted by calling on the government to reinstate Abstinence-Only funding:

The current recommendation before Congress in the 2011 budget zeroes out abstinence education, and puts all the money into broader comprehensive education...I hope that either the White House amends their request or Congress acts upon this, reinstating abstinence education.²⁶⁴

However, the situation wasn't that simple. Although the program in the University of Pennsylvania study was abstinence-based, it was far from the federal definition of Abstinence-Only education. In fact, it was specifically designed to test teaching abstinence in a more effective way than by following the guidelines written by politicians.²⁶⁵

What was so different about this program? Most significantly, it purposefully avoided morality, religion, and marriage. It did not teach that premarital sex is wrong. The program encouraged abstinence, but instead of insisting they wait until marriage, instructors told students to wait until they were ready.²⁶⁶

The program encouraged students to think for themselves, and to consider how their personal goals would be affected

by an unplanned pregnancy or an STD.²⁶⁷ Also, although the program did not cover contraceptives, questions about them were answered with medically accurate information²⁶⁸ and instructors were not forced to say they were ineffective.²⁶⁹

According to Sarah Brown:

*They simply said delay...Wait a bit. Sex is serious. It has risks. And we just recommend you wait until you're older.*²⁷⁰

David Wiley, president of the American School Health Association, said:

*That sends a message to people that you can do abstinence-only, but you need to be smart about it...It proves that when you do it the right way, using medically accurate information, you get better results.*²⁷¹

For the first time, both Safe Sex and Abstinence-Only supporters could agree on an approach, but it didn't match any of the strategies they had supported in the past.

It was time for a new message.

ON THE SHOULDERS OF GIANTS

Teaching about contraceptives hadn't helped enough. Teaching that sex before marriage is wrong hadn't helped at all. But as the University of Pennsylvania study showed, asking teens to think for themselves, and to wait a bit, worked remarkably well. And that is exactly what Gaga did when she sang, "slow down and think about it." However, the Three Month Rule could never have succeeded without the contributions of both major sex education efforts that came before it.

First, Safe Sex had already raised awareness of STDs and contraceptives, which provided the basis for the Rule. If Gaga had to communicate those ideas as well, the message would have been too complex to take hold. Second, the swing toward traditional conservative values that accompanied the Abstinence-Only movement helped remove the stigma²⁷² of virginity, transforming it into something to be prized, rather than ashamed of, even for teenage boys.

In 2007, a national survey found that most teens felt that boys were often told they should be having sex, and that girls were told that attracting boys and looking sexy was one of the most important things they could do.²⁷³ Yet only two in ten said it was embarrassing for teens to admit they are virgins, and males answered almost identically to females. Their parents, products of a different era, didn't know how much things had changed – twice as many adults thought teens would be ashamed of their virginity.²⁷⁴

Without the foundation laid by Safe Sex and Abstinence-Only, Gaga's movement never would have gotten off the ground. Also, it's not as if either of these previous messages went away.

The age-old principles of Abstinence-Only-Until-Marriage are still promoted today by many groups, particularly religious organizations. Parents also promote this strategy to their children, which is most important because no school program can hold a candle to the impact of parental guidance.²⁷⁵ This continues to be the driving force behind abstinence among young people, as teens today are still most likely to state that they have avoided sex for religious or moral reasons, just as they were in 2010.²⁷⁶

The ideas behind Safe Sex are also still promoted by several organizations, such as the Centers for Disease Control and Prevention and the World Health Organization. While they do communicate the benefits of abstinence, their primary objective is to maintain public health. They focus on educating people about contraception, which continues to help lower disease and pregnancy rates among sexually active young people.²⁷⁷

Neither Abstinence-Only nor Safe Sex was a silver bullet, but each helped in its own way with different segments of the population. Gaga's movement added a third message to the mix, one that came from a different angle without interfering with the other two strategies. Together, the combination was more persuasive than any single message would have been on its own.

SEX EDUCATION TODAY

Each of these messages helps in different ways, which is why modern sex education uses a blend of all three. After further studies confirmed that abstinence-focused education can produce positive results, the government integrated the strategy into its guidelines for federally funded curricula.

Today, comprehensive sex education begins by teaching abstinence in the fifth and sixth grades.²⁷⁸ This is the stage when it is the most effective²⁷⁹ and the benefits far outweigh the drawbacks of withholding information about contraceptives. Programs are similar to the one in the University of Pennsylvania study in that they do not take a moralistic tone or disparage contraceptives. Instead, they teach about the emotional and physical risks of sex and use

scientifically accurate data to get students to visualize how those could negatively impact their lives.

Programs in the seventh and eighth grades are similar, but include more information about STDs. They focus on the diseases most commonly transmitted by oral sex, which has become increasingly reported as commonplace activity in middle schools – not just among students, but also on school grounds.²⁸⁰ Whereas earlier generations viewed oral sex as more personal than intercourse,²⁸¹ young people in the 2010s treated it casually, seeing it as a step between kissing and sex that was appropriate for people who were not in love, or even dating for that matter. They were far more likely to engage in oral sex than vaginal sex, and when they did, they almost never used condoms.²⁸² To help combat this, students today are taught the Three Month Rule and that oral sex “counts” as sex. Although all sexual activity is heavily discouraged, students are also taught about *smarter.gov*, a website operated by the CDC that promotes abstinence, but also provides videos tailored to a young audience about how to obtain and use contraceptives. This way, the information is made available to the few who need it without diluting the message for the majority who do not.

After four years of building a solid foundation on abstinence, the curricula changes in the ninth grade to reflect the social environment of high school, where 14-year-olds try their hardest to emulate their 18-year-old schoolmates and sexual activity picks up sharply.²⁸³ The impacts of teen pregnancy are discussed in depth. Students view and discuss episodes of *16 & Pregnant*, a reality television series produced by MTV that shows the hardships caused by unintended pregnancies in a

documentary format. The show is now in its 32nd season, but when it first aired in 2009, many parents worried that it glamorized teen pregnancy. However, teens overwhelmingly felt the show helped them better understand the challenges of pregnancy and parenthood.²⁸⁴

High school sex education teaches about multiple forms of birth control and is required to demonstrate how to use condoms, which helps prevent young people from becoming overconfident without actually knowing how to protect themselves.²⁸⁵ Furthermore, Gaga’s message, the Three Month Rule, is now taught as the second step of safe sex practices, right after the first step: abstinence.

Previously, the “ABC” method was a safe sex teaching tool that became popular after being credited with lowering an entire country’s HIV rate.²⁸⁶ It stated:

Illustration: ABC Method

- 
- The illustration is a vertical list of three items, each with a large letter and a corresponding phrase. The background is a light orange color. The items are: 'A Abstinence Do not have sex before marriage.', 'B Be Faithful When you do have sex, practice monogamy.', and 'C Condoms Use condoms consistently and correctly.'
- A** **Abstinence**
Do not have sex before marriage.
 - B** **Be Faithful**
When you do have sex, practice monogamy.
 - C** **Condoms**
Use condoms consistently and correctly.

Today, American schools teach the “AWAKE” method, which emphasizes waiting.²⁸⁷ From fifth grade onward, the message is clear at every stage: It is a bad idea for students to have sex. However, trying to convince young people to act more responsibly works better when they are not just

educated about risks, but also taught how to make better decisions in general. Furthermore, while improving critical thinking skills helps them avoid danger, it also improves almost every aspect of their lives, including their academic performance.

Illustration: AWAKE Method



Practicing making difficult decisions helps prepare young people for greater challenges down the road.²⁸⁸ For example, teens with more confidence and self-control are more likely to follow through on intentions to remain abstinent or follow safe sex practices.²⁸⁹ Also, remaining abstinent does not only prevent disease and pregnancy, but is also associated with better grades, lower rates of drug and alcohol use, and even lower rates of depression.²⁹⁰

After further studies showed that a wide range of positive behaviors were all interrelated,²⁹¹ and also that more time had to be spent on abstinence-based education for it to be

effective,²⁹² sex education was expanded in a way that has redefined the role of the public school system.

In fact, we don't even call it "sex education" anymore. Abstinence and safe sex practices are now taught as part of a relatively new subject called "Comprehensive Life Skills for Success and Well-Being" (CLS). "Life skills," as it is most commonly known, is taught at all grade levels alongside other subjects like English, math, and history.

Life skills courses aim to improve students' physical and emotional health, as well as teach them to think critically and achieve goals. Just as with academic subjects, lessons are adapted to be developmentally appropriate. For example, younger students are taught the value of telling the truth, how to recognize bullying or abuse, and what to do if they get lost.²⁹³ By the end of grade school, students learn basic first aid skills and how to make healthier eating choices, and starting in middle school, students learn strategies for avoiding drugs and alcohol.²⁹⁴ Beyond just learning about contraception, high school seniors are prepared for adult life with lessons in how to apply for college, how to interview for a job, and even how to manage their finances, including basic information about taxes, mortgages, and credit cards.

When life skills was first introduced, liberal critics branded it as brainwashing, arguing that teaching morality had no place in public schools²⁹⁵ and that doing so would steal already limited time and funding away from vital subjects. Educators answered that life skills courses only promote universally shared cultural values, like honesty and personal responsibility, that have been scientifically proven to lead to success. Although these values are also highly

prized by the religious community, life skills courses present them in a completely secular manner.

Conservatives pointed out that most private schools split time between academics and religious development²⁹⁶ and still get better test scores.²⁹⁷ They applauded the values taught in CLS, however they took issue with the sex education component, saying that teaching the Three Month Rule along with information about contraceptives gives teens tacit permission to have sex. Educators calmed their concerns by promising that parents would receive an overview of the course at the beginning of each year and could opt to remove their children from the portions with sexual content. They also assured them that after they saw how effective the classes were, they wouldn't want to exercise that option.

The results spoke for themselves. Pilot programs showed life skills courses contributed to overall academic performance and convinced more students to delay sex than any previous approach.²⁹⁸ The sex education component also shared several characteristics with some of the only programs to gain support from both Safe Sex and Abstinence-Only advocates. For example, in 2009, North Carolina began a two-part program: The first portion stressed abstinence, the second taught about contraceptives, and parents could remove their children from either. The program got the support of Planned Parenthood as well as conservative groups. Reverend Mark Creech, executive director of the Christian Action League, called the program a good compromise, saying:

When it became apparent that we weren't going to be able to succeed [in providing just abstinence-only

education], we shifted to try to preserve as much of the abstinence message as possible.²⁹⁹

As a central tenet of modern sex education, the Three Month Rule was crucial to its widespread acceptance. Not everyone supported it: The extreme left found the Rule too restrictive and the far right thought it was too permissive. However, the vast majority saw it as a reasonable middle path that bridged the chasm between Abstinence-Only and Safe Sex without interfering with either. Pragmatic Abstinence-Only supporters knew that even though the Rule didn't ask people to wait until marriage, following it effectively meant abstinence for the characteristically short-lived relationships of young people. And Safe Sex advocates were happy to see STD and teen pregnancy rates drop, even if it meant promoting conservative values.

As life skills classes were rolled out across the country, grades shot up, pregnancy rates fell, and the debate simmered down. Today, every state accepts federal funds to teach life skills and requires CLS classes for general teaching certification. This means that sex education is no longer given the short shrift of an hour-long visit from the school nurse or a presentation from an outside group. Instead, abstinence and safe sex practices are always taught by experienced educators who know the students. Furthermore, they integrate the most important components of all three messages, Safe Sex, Abstinence-Only, and the Three Month Rule, into the most effective strategy for increasing sexual responsibility ever developed.

REASON #2: THE MOVEMENT WAS EMPOWERING

Gaga started a cultural revolution. Throughout the 2010s, people around the world started waiting longer before having sex and became more selective about choosing sexual partners. They also started getting married earlier and staying married longer, changing our societal norms to what they are today.

However, it was not the first time the Western world underwent a rapid shift in sexual behavior and attitudes. Fifty years earlier, the 1960s saw a series of changes in the opposite direction. Birth control promised consequence-free sex.³⁰⁰ Divorce rates doubled in a decade.³⁰¹ The concepts of sexual liberation and free love lifted the stigma from all manners of sexual activity occurring outside traditional, monogamous marriages. The Sixties ushered in an era of promiscuity, and by the end of the decade, divorce laws were relaxed³⁰² and marriage had begun a steady decline that lasted for 40 years.³⁰³

History has a habit of repeating itself, though, and eventually the pendulum swung back. In the 1960s, we had a revolution of sexual freedom. Later, in the 2010s, we had a revolution of sexual responsibility.

There were a remarkable number of similarities between the two movements. They both rejected societal norms about sexual behavior, they both first took hold in the youngest generation, and in both, the ideas were largely spread through music. Most significant, though, was that both caused real social change by empowering people.

Free love gave us the power to say “yes” to all manners of sex without suffering stiff social penalties. The Three

Month Rule, on the other hand, gave us a similar power to say “no.” (Or, at least, “Not right now.”)

THE WORLDWIDE WAIT

The AIDS scare peaked at the midpoint between these two movements.³⁰⁴ Then, public concern began to wane and progress against the disease in the United States screeched to a halt.³⁰⁵ With the Slow Down Project, though, Gaga turned the world’s attention back to AIDS and began a new effort to combat it.

In her speech announcing the project, her final words were: “By working together, we will be the generation to beat AIDS.” By following the Three Month Rule, people weren’t just helping themselves; they became part of a worldwide effort to eradicate a deadly disease. This had an especially large impact on the group that AIDS affected the most in America: gay and bisexual men.³⁰⁶

Previous efforts to promote abstinence and monogamy had been inextricably tied to religion, which gave them little hope of persuading the gay community. It’s not as if gay men were not religious; in fact, 70 percent identified as Christian,³⁰⁷ almost the same ratio as the nation as a whole.³⁰⁸ Most other Christians didn’t know this, in part because they rarely saw gay men in church³⁰⁹ and also because homosexuality is condemned in several books of the Bible.³¹⁰ Many gay Christians, however, focused exclusively on the words of Jesus, who never spoke of homosexuality³¹¹ and taught that, speaking as the son of God, his simple rule of universal love superseded the rabbis and the mitzvat – the 613 commandments of ancient Jewish law³¹² – a practice that led to his execution.³¹³ Fundamentalist Christians believed that the

Bible should be followed to the letter, but others argued that many of its ancient rules didn't apply to modern society, pointing out how only a few pages before calling homosexual sex "an abomination" in the Bible,³¹⁴ God says the very same thing about eating shellfish.³¹⁵

The disagreement over what it meant to be a good Christian left a rift between the two groups. Whereas most Americans looked to religion to guide their decisions, the vast majority of the LGBT community did not,³¹⁶ and very few gay men attended church weekly.³¹⁷ This was not surprising, considering most churches frequently condemned homosexuality.³¹⁸ One fundamentalist "church" even spent hundreds of thousands of dollars per year to fly its members around the country to hold "GOD HATES FAGS" signs at high-profile events.³¹⁹

At the end of the day, the divide was just too wide. Christianity promoted Abstinence-Only-Until-Marriage, but gay people couldn't even get married in all but a few states.³²⁰ Extremists aside, an overwhelming number of mainstream religious people held negative views toward homosexuality.³²¹ Few thought that it was caused by genetics and most thought it was a choice,³²² leaving gay people to feel persecuted over something they felt they had no control over.³²³

This helps explain why *Born This Way* was so popular in the gay community. In fact, Elton John called the 2011 hit "the new gay anthem."³²⁴ They may not have been listening to church sermons, but they were listening to someone: Lady Gaga.

However, they listened to her not just when she sang, but also when she spoke. She was a longtime proponent of gay

rights,³²⁵ and many compared Gaga to Martin Luther King, Jr.: She waged a peaceful war to end discrimination against the LGBT community similar to how the civil rights icon had done so for the black community.³²⁶ And after *Born This Way* rallied the troops, *Slow Down* gave them marching orders.

This was crucial to the fight against AIDS since the risk was so concentrated in the gay community. According to the CDC, men who had sex with men (MSM) were up to 86 times more likely than straight men to be diagnosed with HIV, and in a study of 21 major US cities, one in five MSM had HIV, but nearly half were unaware of it.³²⁷ Compounding the problem, relatively few gay men were monogamous³²⁸ and “barebacking,” i.e., abandoning condoms altogether, was a growing trend.³²⁹ So when Gaga said to slow down, it was incredibly important that the gay community listened.

The Three Month Rule gave a new reason to be sexually responsible, one that had nothing to do with religion or morality. Furthermore, the reason was external. A man telling a prospective partner he wanted to wait was nothing personal; it was part of a broad effort to keep the gay community safe and beat the disease that had been decimating it. Some followed the Rule as a matter of gay pride, which caused others to follow it to avoid being ostracized as betrayers of their community, an important aspect of many gay men’s lives.³³⁰ Still others followed it out of self-preservation: With so many gay men following the Rule, it was only logical to assume that the ones who ignored it were the riskiest potential partners. The exact reasons didn’t matter as much as the fact that so many

started following the Rule, waiting longer and getting tested before having sex with a new partner.

Even more important, and what made the Slow Down Project a success, was that it convinced enough people to change their behavior at the same time to make the differences stick. The triumph of the movement came when it seemed normal to follow the Rule. After all, even when we are alone, the decisions we make about our health are largely based on what we believe society expects from us.³³¹ However, when the movement was just getting started, certain pockets of the population led the charge, evangelizing the Rule because it was personally important to them.

Research on another abstinence campaign found that those who took virginity pledges felt that the decision to abstain became part of their identity, and furthermore that such movements were only effective when the right number of people took the pledge. If too few participated, pledgers lacked adequate social support; however, if too many participated, the pledge lost its meaning as a distinctive expression of their personality.³³²

This phenomenon had the largest impact among gay men, but it also played a similar role in other minority groups that were disproportionately affected by HIV.³³³ Whether due to gay pride, black pride, or Latino pride, the Three Month Rule became a separate identity movement within each group, gathering together enough people to be sustainable. After it seemed that most people were following the Three Month Rule, dynamics similar to those observed in minority communities benefited another group of people who also bore an imbalanced portion of sexual consequences: women.

On top of bearing the risks of pregnancy, women are also the ones who typically end up taking care of unplanned children.³³⁴ In addition, they are physiologically more susceptible to STDs than men are.³³⁵ Yet men are the driving force behind the sexual aspect of most heterosexual relationships.³³⁶ As such, they enjoy a variety of double standards that give them enormous freedom and power,³³⁷ forcing women into the role of choosing between meeting a man's needs or restricting his pleasure.³³⁸

Before the Three Month Rule, this was a larger problem, especially for young women. There was a growing trend of extremely casual sex, particularly on college campuses.³³⁹ Whether they called it "hooking up," having a "booty call," or being "friends with benefits," most college students had sex with people with whom they did not have a romantic relationship.³⁴⁰ This suited men just fine, but it left women feeling used.³⁴¹ Women's sex drives are radically different than men's³⁴² and most women would prefer to establish a stronger emotional bond before having sex with a new partner, but many acquiesce just to keep prospective mates from looking elsewhere.³⁴³ Despite the popular belief that hooking up was harmless, the practice often led to unwanted sex,³⁴⁴ and even when these casual encounters were completely consensual, women frequently regretted them.³⁴⁵

This made young women very receptive to the Three Month Rule.³⁴⁶ The arrival of a new reason to wait, especially one that couldn't be taken personally by men, was embraced by women of all ages who wanted to delay sex. But just as with the minority groups, what was most important was that so many women decided to follow the Rule at the same time.

Almost every aspect of human behavior can be described using economic terms, even sex. Economically speaking, since men generally want sex more than women do,³⁴⁷ female sexuality has a greater value within heterosexual communities. This explains why, for example, female virginity has been historically prized, but male virginity has not.³⁴⁸ As defined by societal gender roles in the market for mates, men are “buyers” and women are “sellers.” All typical laws of supply and demand apply. If only a few women had made sex scarcer by waiting longer (raising the price), men would have simply turned to more promiscuous (cheaper) competitors.

However, the widespread following of the Three Month Rule amounted to a “collusion among sellers.” More commonly known as price fixing, this practice requires sellers to cooperate and is one of the only ways around normal market pressures. It also leads to the common benefit of the sellers – women, in this case – which helps explain the movement’s sustainability.

Note that this could have backfired if Gaga had asked people to abstain instead of just wait. To see the unintended consequences of a rule that forbids a desirable activity, one needs look no further than the United States government’s attempt to legalize alcohol in 1920. The “Noble Experiment” utterly failed. Prohibition did not end the targeted behavior, it just drove it underground, making it more costly and dangerous³⁴⁹ – which is precisely what happens when sex is banned.

Epidemiologists and economists alike have shown how, when a large portion of a population abstains, sexual activity becomes concentrated among the remaining population and disease spreads even faster, ultimately

hurting everyone, even those who abstain.³⁵⁰ Another bleak possibility: Links have been observed between sexually repressed cultures, such as those in the Middle East, and violence.³⁵¹ The United States, already one of the most repressed³⁵² and the most violent³⁵³ of the developed nations, could have been pushed in a dangerous direction. Fortunately, none of this happened. The Three Month Rule didn't make sex rare, it just raised the amount of investment required to get it, which in turn increased its perceived value for both men and women.³⁵⁴

Plenty of young men decided to live by the Rule of their own volition. Traditional gender roles dictated that males should seek sex at every opportunity, but not all men wanted to act this way.³⁵⁵ The Three Month Rule eased this pressure, allowing males to approach a relationship slowly without being viewed as less masculine.

Nevertheless, young heterosexual men were the group least receptive to Gaga's message overall,³⁵⁶ and when a new partner wanted to wait longer than they preferred, they often weighed their options. They could pursue another woman instead, but the movement was so widely accepted that, among comparable prospective mates, few pastures were greener. They could lower their standards, seeking out less desirable mates who might be more willing to break the Rule, but most decided that would be unsatisfying. They could also just pay for sex, but despite alarmist predictions, asking them to wait a few months was not enough to send droves of men into the arms of prostitutes. The vast majority came to the conclusion that the best option was simply to wait. (And perhaps to try to be such a good boyfriend that a woman might consider breaking the Rule a few weeks early.)

The Three Month Rule meant longer courtship, which women also enjoyed.³⁵⁷ To some, waiting served as a trial by which a prospective mate could prove his worth and devotion, a modern spin on a romantic custom once thought lost. Flying in the face of social stereotypes, a man who followed the Rule was seen as having greater value, for both his self-control and safety. By comparison, one who ignored the Rule appeared to be immature and a bad risk.

Since so many women chose to follow the Rule at the same time, it gave them the collective bargaining power to delay sex without suffering social penalties or limiting their selection of mates. Normally, when sellers cooperate to manipulate the market, buyers are harmed. On the surface, it may appear that men, as the more reluctant participants in the movement, lost out. In reality, though, they were only temporarily inconvenienced, and in the long run they enjoyed all the same advantages that women did. Men benefited from lower disease and unplanned pregnancy rates too, but they also ended up getting more of what they wanted. As stated earlier, those who waited to have sex within an established, committed relationship tended to have more frequent and more satisfying sex. This experience created a positive feedback loop that has left more men than ever before seeking long-term partnerships instead of casual sex. As it turned out, waiting a little longer wasn't that bad after all.

MOVING THE STARS WITHIN REACH

The Three Month Rule may have ended up working better, but it is not as if the ideas that came before were worthless. At first glance, Safe Sex and Abstinence-Only seem like very sensible approaches. After all, living by either strategy requires keeping only one simple commitment.³⁵⁸ To get

the reasonably good protection of Safe Sex, one must follow through on this pledge:

I will use a condom every time I have sex.

On the other hand, Abstinence-Only offers ironclad safety when two people live up to this vow:

I will not have sex outside of marriage.

Both of these promises are admirable, but although they seem straightforward, in practice they are extremely difficult to keep. So difficult, in fact, that they make ineffective goals. To see why, we must examine in detail how goals work.

Personal goals are powerful. They guide our actions, motivate us, make us more persistent, and increase our chances of getting what we want in life. Many factors affect whether we achieve our goals, including their importance, their difficulty, our commitment, our confidence, the amount of feedback we receive, and the quality of the goal itself.³⁵⁹

Identifying a good personal goal is a complex process. They should be optimistic, but realistic. This does not mean they should be easy; on the contrary, they should seem challenging, just not impossible.³⁶⁰ The best goals push the limits of our ability. The harder the goal, the harder we work... up to a point.³⁶¹

The benefits of setting easy goals are small, but become larger as the goals become harder. It's best when they are challenging, but not too challenging, because goals stop helping us when they are too difficult.³⁶² Finding the sweet spot between these two extremes is critical to success,

because our behavior toward a goal depends largely on how difficult it appears to be.³⁶³ Specifically, when goals seem impossible, we don't bother trying. When they are too easy, we don't take them seriously and ignore them as afterthoughts.³⁶⁴

In this regard, Safe Sex educators did students a disservice by portraying condoms as being so easy to use.³⁶⁵ As a result, teens became overconfident. They promised themselves they would use condoms without even knowing how,³⁶⁶ then, since it didn't seem difficult enough to worry about, moved their commitments to the backs of their minds.

Educators likened using a condom to wearing a seat belt, but presenting condoms as such a simple solution was dangerous because, in the heat of the moment, whether or not to use a condom is a far more complicated decision. By appearing too easy, the Safe Sex strategy gave a false sense of security and did not prompt a response that reflected the serious consequences of not following it perfectly. Just committing to use condoms was not an ideal goal because it did not challenge people enough to motivate them to put in the thought, planning, and effort required to actually follow through on their intentions.

Living by Abstinence-Only was also not an ideal goal, but for the opposite reason: It seemed too difficult. Part of this is due to the vague nature of any vow to wait until marriage. For us to control our behavior, goals need to be specific.³⁶⁷ In this case, the course of action is clear, but the endpoint is unknown. For most Americans, until the invitations have been sent and some non-refundable deposits have been paid, people have no idea when, or even if, they will be married.

Furthermore, the institution of marriage itself was in decline. In 2011, the US Census reported that marriage was at an all-time low, with single adults recently outnumbering married adults, and those who were getting married were waiting longer than ever before.³⁶⁸ Between the end of World War II and the 1970s, the median age of first marriage held constant, remaining between 20 and 21 for women and around 23 for men. After that, a variety of social and economic pressures encouraged people to delay marriage,³⁶⁹ and these numbers raced upward.³⁷⁰ By 2009, the median age of first marriage for both sexes was rapidly approaching 30, and showed no sign of stopping.³⁷¹

This seemed like an awfully long time to wait for most teens, and with good reason. Humans use a different part of the brain when thinking about the near future versus the distant future,³⁷² especially when thinking about immediate rewards.³⁷³ The longer we have to wait for a reward, the less valuable it is to us at the present moment,³⁷⁴ to an exponential extent.³⁷⁵ This makes it difficult for us to weigh what we want right now against our long-term goals.

Adolescents have an even harder time waiting because they view the future in shorter terms than adults. Young children can barely imagine next week, while adults can plan for events several years in the future. The brains of teenagers are somewhere in-between, and their concept of the future has not fully formed yet.³⁷⁶

To make matters worse, time seems to drag even more for people who are suppressing their natural urges.³⁷⁷ Albert Einstein summed it up expertly:

An hour sitting with a pretty girl on a park bench passes like a minute, but a minute sitting on a hot stove seems like an hour. That's relativity.³⁷⁸

Add that to the fact that Americans were marrying later, or not at all, and waiting until marriage seemed like an eternity to teenagers. In fact, it was hard for them to even imagine waiting that long, and this was part of the problem. Visualizing ourselves taking an action is an important step toward actually following through,³⁷⁹ but such mental simulations, although imaginary, are still based on reality.³⁸⁰ And the reality was that virtually no one waited until marriage.

In 2002, 95 percent of Americans in their mid-forties said they had premarital sex. Furthermore, this was not a new trend. Despite wistful recollections from grandparents, those who thought the “good ol’ days” were much different were viewing the past through rose-tinted bifocals: Even among women born in the 1940s, about nine in ten had sex before marriage.³⁸¹

In a country that was almost 80 percent Christian,³⁸² fewer than 5 percent lived up to the ideals of Abstinence-Only.³⁸³ Even evangelicals knew this. In a *Christianity Today* article, sociologist Mark Regnerus wrote:

...few evangelicals accomplish what their pastors and parents wanted them to ... when people wait until their mid-to-late 20s to marry, it is unreasonable to expect them to refrain from sex. It's battling our Creator's reproductive designs. The data don't lie.

...just under 80 percent of unmarried, church-going, conservative Protestants who are currently dating someone are having sex of some sort. I'm certainly not suggesting that they cannot abstain. I'm suggesting

*that in the domain of sex, most of them don't and won't.*³⁸⁴

Yet marrying younger wasn't an ideal solution, either. Those who married before the age of 18 were twice as likely to get divorced within ten years as those who married at age 25 or older.³⁸⁵

Parents knew that young love often doesn't last and told their children not to rush into marriage, saying it could wait until after college or a career. But this made asking them to forgo sex until marriage that much harder. In fact, these parents had no idea just how difficult what they were asking their children to do was. To remain abstinent until marriage, people born in 1982 had to wait two to three times longer after high school than those born in 1953 did.³⁸⁶ They meant well, but it was hypocritical to tell children to entrust their health and well-being to a strategy fewer than 5 percent of parents had been able to follow themselves.

Abstinence-Only was not an ideal goal because it placed a set of demands on young people that seemed impossible. No one should have been surprised when 14-year-old boys didn't follow through on their pledges to avoid sex until they were almost 30. After all, if adolescents could accurately plan their life decisions 15 years in advance, we'd have a nation of millionaire professional football players and marine biologists.³⁸⁷

DROWNING IN LAKE WOBEGON

Always use a condom. Wait until marriage for sex. Why are these two simple goals so difficult to achieve? Because both require levels of self-control rarely found in humans.

Statistically speaking, you probably have not followed either of these rules perfectly in your own life. Furthermore, you probably think that you could have if you had really wanted to, or that your circumstances were uniquely challenging, or that you made your decisions for better reasons than most people. This is because you think you are better than other people. It's OK; we all think this way.³⁸⁸

Humans, particularly in Western cultures,³⁸⁹ have startlingly high opinions of themselves. As one researcher put it:

...most of us appear to believe that we are more athletic, intelligent, organized, ethical, logical, interesting, fair-minded, and healthy – not to mention more attractive – than the average person.³⁹⁰

Our opinions of ourselves are even more inflated for qualities that are subjective and hard to measure.³⁹¹ Of course, we don't think we can perform surgery if we have not gone to medical school. But we do think we are better than most at everyday activities, like making decisions or judging a person's character.

When evaluating such skills in any group of people, half are above-average and half are below-average. Yet nearly everyone thinks they are in the top half. For example, we all know that some people lack social skills, yet in a survey of nearly a million people, fewer than 1 percent said they were below-average at getting along with others.³⁹²

We think about ourselves in very different ways than we think about other people. When we win a game, we credit our superior skill. When our opponent wins, however, we chalk the loss up to bad luck.³⁹³ Similarly, when we do not live up to our promises, we forgive ourselves quickly: We make excuses, blaming others or factors outside our control,³⁹⁴ and we give ourselves credit for our good intentions.³⁹⁵ When others fail, on the other hand, it is obviously due to their personal flaws.³⁹⁶

We can easily see how everyone else deludes themselves into thinking they are better than most people. Yet even after learning exactly how these biases work, we still refuse to recognize that we think that way ourselves.³⁹⁷ But we are all guilty of it. Consider this example: Imagine you are driving and you come to a four-way stop. When your turn comes up, you step on the gas only to find that another car has entered the intersection at the same time. As you slam on the brakes, what is your reaction? Do you get angry at this rude and careless person? Do you even consider the possibility that you misjudged whether it was your turn? Even if you do, once you get past the scare of a near collision, you'll almost certainly forgive yourself quickly:³⁹⁸ You were in a legitimate hurry, you were distracted, or perhaps the sun was in your eyes. Even if this happens to you every day, you'll probably never blame yourself. Instead, you'll just be irritated that there are so many bad drivers out there.

We all think this way. Among developed countries, the United States has the second-highest traffic-related death rate.³⁹⁹ Yet practically all Americans think they are one of the better drivers on the road.⁴⁰⁰ In one survey, most respondents said they drove one-handed while they talked

on the phone, most said they went over the speed limit, and over three-quarters admitted to eating while driving, yet 99 percent still described themselves as safe drivers.⁴⁰¹

Having an inflated opinion of ourselves is human nature – and it’s actually healthy.⁴⁰² However, all this delusion does have its drawbacks. Notably, it creates a huge blind spot when it comes to making risky decisions. We think we are better than most people and we don’t like being labeled,⁴⁰³ so when we hear warnings or statistics, we think they don’t apply to us. If a man hears on the news that older, overweight people with inactive lifestyles are at greater risk of diabetes, he is likely to ignore it, even if he is 65 years old, heavysset, and gets little exercise. They couldn’t be talking about him; they must only be talking about all those other older, overweight people with inactive lifestyles.

We are wildly optimistic about our futures and think that bad things won’t happen to us,⁴⁰⁴ or even to our friends and family.⁴⁰⁵ We think that, because we are smarter and more in control than those “other” people, we will be able to avoid any negative consequences.⁴⁰⁶ This makes us feel immune to danger, particularly when we are young.⁴⁰⁷

Compounding the problem, we think we have more free will than others.⁴⁰⁸ We grossly overestimate our ability to restrain ourselves, and as a result, we often put ourselves into riskier situations than we can handle, then give in to temptation.⁴⁰⁹ We start new a diet thinking we can stick to it, but we don’t. When we fail, we blame the diet, or the holidays, or unforeseen stress, or anything but our own lack of willpower. Then we start a different diet and start the process over again.⁴¹⁰

THE SCORPION AND THE FROG

Our eating decisions provide a great way to illustrate how our ability to control our impulses depends on the situation. We might swear off sweets after gorging ourselves at a buffet, or after our doctor tells us we should lose weight. However, making a promise in that situation is the easy part; keeping it in another is a different matter. There is a big difference between resisting some imaginary cookie when you aren't hungry and turning down a real cookie in your hand when you haven't eaten all day.

We make optimistic plans like this in what psychologists call a “cool” state, that is, when we are calm and rational enough to think about the future. Unfortunately, we frequently have to make decisions in a “hot” state, such as when we are angry, tired, or hungry, when we do not have the luxury of such clear thinking.⁴¹¹

Even as intelligent beings, we often make decisions contrary to our best interests.⁴¹² We trade in our long-term well-being for immediate gratification. We eat that cookie even though we are trying to lose weight. We are imperfect. We don't have complete control over our behavior; if we did, we would never overeat or snap at our loved ones. Our physical urges sometimes override our intentions. No one ever decides to fall asleep while driving; it just happens.⁴¹³

The way our brains operate makes the decisions we make about our health complex and very difficult to predict.⁴¹⁴ As stated earlier, we evaluate immediate and long-term rewards using completely different areas of our brains.⁴¹⁵ Emotions heavily influence our conscious decisions,⁴¹⁶ but we make most of our decisions automatically, with no thought at all.⁴¹⁷ Our bodies can figure out what we want to

do before we even know it.⁴¹⁸ In fact, the parts of the brain that make some decisions activate well before we are even aware we have made a choice.⁴¹⁹

Furthermore, our senses can literally shut off the areas of the brain that govern higher thinking.⁴²⁰ When we are in a “hot” state, such as when we are hungry or angry, neurons in a certain region fire more rapidly.⁴²¹ Unfortunately, this is the same region associated with making bad decisions,⁴²² and, no pun intended, feeling sexually aroused puts people in an incredibly “hot” state of mind.

Sexual excitement clouds logic and undermines efforts to remain abstinent. In one illuminating study, male college students were asked to answer questions about how they would act if they were aroused. Later, they answered the same set of questions when they actually were aroused. In every case, how they thought they would act and how they actually did was very, very different.

When just imagining they were aroused, most men said they could be satisfied with “just kissing.” But when actually aroused, the vast majority said that would be frustrating, including many who previously said otherwise, and aroused men were more than twice as likely to say they would keep trying to have sex after a date said “no.”

It gets worse. When sexually excited, rationality doesn't just take a back seat; it can disappear completely. In an aroused state, these men were twice as likely to say they could imagine being attracted to a 12-year-old girl, three times as likely to think bestiality could be exciting, and five times as likely to drug a woman to get her to have sex.⁴²³ This impaired mental state thwarts efforts to follow Safe Sex as well. Research has shown that, compared to how

they normally think they would act, men who are aroused are more likely to engage in risky behavior and less likely to use a condom.⁴²⁴

Even if we are in the habit of always wearing a seat belt, we might neglect to do so occasionally when something else is on our minds. When the time comes to decide whether or not to have sex or use a condom, though, something else is *always* on our minds.

Teens make these promises, i.e., to always use a condom or to wait until marriage, in a “cool” environment, like a classroom or a church youth group, but they have to decide whether or not to follow through under very different circumstances. Dozens of arguments that make no sense in a classroom become very persuasive in the back seat of a car. The timing feels right. The moonlight is so pretty, and our song just came on. We’re in love, or at least I think we are. We can’t really wait “forever,” so why wait any longer? Stopping to buy a condom would kill the mood. What we’re doing feels really good. Going a little farther just this one time won’t hurt.

Some people give in to temptation like this on a daily basis; a rare few can hold out for years. Everyone gives in now and then, though. Sometimes we are able to control our urges, but others times we cannot. Why is this?

Interestingly enough, modern research suggests that self-control works just like a muscle.⁴²⁵ Whenever we deny our most basic desires, like keeping our temper in check when provoked, or exercising rather than watching TV, or even just resisting that delicious cookie, we use our “willpower muscle.” The similarities between mental strength and physical strength are uncanny. Just like muscles, our

willpower gets fatigued as we use it. The longer we continuously strain ourselves, the harder it becomes to keep controlling our behavior, although we recover with rest.⁴²⁶ Also just like muscles, some people have more discipline than others, but everyone has their limit. Given enough pressure, anyone's willpower will give in to exhaustion.⁴²⁷

A wide variety of outside factors weaken this mental muscle, many of which are out of our control, like illness and injury.⁴²⁸ Also, even though they seem unrelated, everyday activities like waiting in a line, being polite, concentrating, and even shopping all sap our willpower.⁴²⁹ It isn't even all in our heads. It's in our hearts, or, more accurately, our bloodstreams. We tend to have more discipline when our blood sugar level is high. Yet a single act of self-control makes our blood sugar drop, making it harder to avoid temptation until we raise it again, and the resulting hunger makes dieting doubly difficult.⁴³⁰ This phenomenon, known as decision fatigue, helps explain why we reach for comfort food in times of stress,⁴³¹ why eating too little while dieting is a bad idea, and even why we tend to eat more junk food at night, after our willpower has been worn down by making decisions all day.⁴³²

On the other hand, unless we are on the brink of starvation, sex is much more tempting than food. If relatively small factors can lead us to eat a cookie after we told ourselves we would cut back, imagine how much more tempting a willing partner can be to a sexually aroused virgin. We all know that, throughout our lives, events occasionally conspire to create pressure that would break almost anyone's resolve. Yet both Safe Sex and Abstinence-Only demanded perfectly controlled behavior for the

majority of the average American's life,⁴³³ including almost 15 consecutive years between becoming a teenager and getting married – the time when opportunity is highest and wild surges of hormones spike the sex drive.⁴³⁴ To expect teenagers to follow either strategy meant thinking that their willpower would never be strained enough to make a misstep at any point during the trials of adolescence or early adulthood.

Telling young people that these were good goals did them a disservice. One side said they would be safe if they vowed to always use a condom, despite the reality that this is more difficult than lessons made it seem. The other side said they would be safe if they pledged to wait until marriage, ignoring the fact that almost no one actually does this. Such over-optimistic thinking is dangerous: It leads to risky behavior and illusions of invulnerability.⁴³⁵ Adolescents already felt bulletproof⁴³⁶ and this false sense of security just made it worse.⁴³⁷ Students thought that by making a solemn pledge in a classroom, they would be protected. In the heat of the moment though, when their willpower was at its weakest, these promises proved too difficult to keep.

GETTING THE FOOT IN THE DOOR

Fortunately, the Slow Down Project introduced a much better alternative. Whereas Safe Sex seemed too easy to take seriously, and Abstinence-Only seemed impossible, the Three Month Rule was empowering because it was an ideal goal: It was specific and realistic, but still pushed people's limits.⁴³⁸ A three month wait was long enough to demand real effort, particularly back when people typically only waited three dates, but short enough that young people could easily visualize themselves following the Rule,

which dramatically increased the chances that they would do so.⁴³⁹

Ultimately, asking people to wait for a short time resulted in more long-term abstinence than telling them to wait until marriage. This seemed counterintuitive to policymakers, but not to the business world. In sales, this is known as the “foot in the door” approach. Asking for a large commitment right off the bat turns people off and scares them away. On the other hand, getting someone to make a small commitment is not only easier, but also makes them more likely to make a larger commitment in the future.⁴⁴⁰

Psychologists explain this phenomenon with cognitive dissonance theory, which says that whenever we choose between two courses of action, we regret giving up the benefits of the option we turned down. In order to make ourselves feel better, we subconsciously change our opinion of both options, improving our perception of the route we took and lowering our opinion of the one we didn't.⁴⁴¹ In fact, making decisions physically changes us. Once we make a choice, our brains neurologically rewire themselves to expect more reward from making that decision again.⁴⁴²

The Three Month Rule let people experience a rewarding feeling again and again by giving them more opportunities for success, which helped them stick to their conviction. We have the best chance of controlling our behavior when we strive for difficult long-term goals, but divide them up into manageable chunks we can achieve in the near future.⁴⁴³ Each time we overcome one of these smaller hurdles, we gain confidence in our ability to achieve larger goals.⁴⁴⁴

The previous two strategies offered no such encouragement. The core concepts of Safe Sex only applied after people were already sexually active, and even then using a condom was seen as such a small feat that it didn't feel like much of an accomplishment. On the other hand, teens who swore to live by Abstinence-Only could only truly achieve their goal once they were married – 10 or 15 years later.

The Three Month Rule, though, was a significant challenge that started over with each new relationship. When people broke up before the waiting period was over, they could pat themselves on the back for avoiding a physical relationship they might well have regretted. For those who did eventually have sex, the Rule gave them time to discuss contraception and get to know their partners better beforehand, leading to a safer and more satisfying relationship. Either way, they won, and the Rule helped them remain physically and emotionally healthy.

The Three Month Rule is formally introduced in ninth grade, but it is so ingrained in our culture that most children already know it by then. By practicing the Three Month Rule with their very first relationships, young people develop good habits early. This helps even more in the long run because willpower is also like a muscle in that it grows stronger with exercise.⁴⁴⁵ These early successes build confidence in their ability to control themselves and achieve their goals, which is one of the most crucial factors influencing how people make any important decision that affects their health.⁴⁴⁶

After getting the foot in the door, the Three Month Rule does not require a persistent salesman to keep asking for larger commitments. Instead, each small success pushes

people in the right direction. When facing difficult problems, feeling empowered like this leads people to set higher goals and feel more commitment toward them on their own.⁴⁴⁷

THE WIND AND THE SUN

The final factor that made Gaga's movement so empowering was not what she said, but how she said it.

As human beings, we value our independence. We like to be in control of our own lives, so when people tell us what to do, digging in our heels against them is a kneejerk reaction. If this sounds childish, it is perhaps because we exhibit this behavior during our "terrible twos."⁴⁴⁸ However, we act this way at various points throughout our entire lives, especially in periods of transition such as adolescence, and again in old age.⁴⁴⁹ During these times, we often put up resistance whenever we feel pressured to act or think differently. Fighting efforts to change our minds is not necessarily a bad thing,⁴⁵⁰ and can even make us better leaders.⁴⁵¹ It can also lead us to ignore good advice, though, even when we know following it would be our best interest.

This phenomenon is called reactance.⁴⁵² When we feel our freedom is being restricted, reactance automatically kicks in and makes us want to restore it. This reaction is so strong that, in an effort to assert our power and independence, we will sometimes do the exact opposite of what we are told.⁴⁵³ This is known as the boomerang effect. We don't like being told what to do, and nothing makes us more curious about something than being told it is off-limits. The concept is as old as the story of Adam and Eve. According to Mark Twain:

*Adam was but human – this explains it all. He did not want the apple for the apple’s sake, he wanted it only because it was forbidden. The mistake was in not forbidding the serpent; then he would have eaten the serpent.*⁴⁵⁴

As a result, attempts to curb a certain behavior often fail, or can even end up encouraging it. For example, restrictions against selling songs with explicit lyrics to minors hasn’t kept them from topping the charts among young people. Likewise, warnings of sex and violence do not deter people from watching television programs; in fact, they increase interest instead, particularly among adolescents and young adults.⁴⁵⁵

The boomerang effect presents a sticky problem when trying to promote public health, especially to young people. According to a group of researchers at the University of Oklahoma:

*Many health campaigns are geared toward young audiences who want, above all, to be in charge of their own behaviors. Not yet adults, but wanting the freedoms enjoyed by adults, adolescents and emerging adults are bombarded with messages prescribing or prohibiting many of their prospective behaviors—activities they feel deserving of, competent in, and free to engage in. Thus, they are ripe for psychological reactance and may often be motivated to perform the very behaviors proscribed in many of the persuasive messages targeting them.*⁴⁵⁶

Crafting a message that resonates with young people is difficult. In 2009, the most popular youth drug prevention program in the United States, *D.A.R.E.*, was taught in every state and in about three out of four school districts.⁴⁵⁷ Yet just a few years earlier, the Surgeon General concluded the

program didn't work, citing "numerous well-designed evaluations and meta-analyses that consistently show little or no deterrent effects on substance use."⁴⁵⁸ In fact, in 1998 researchers found the program to increase drug use,⁴⁵⁹ and in the same year the program lost its federal funding for being unable to prove it was effective. *D.A.R.E.* wasn't alone. A 2011 meta-analysis found no studies showing anti-drug public-service announcements to have a significant benefit. Worse, a few studies found these messages actually made people more interested in using drugs.⁴⁶⁰

Campaigns like this can have unintended effects because teens react negatively to authority. For example, telling teens to "just say no" actually makes kids more likely to want to try drugs.⁴⁶¹ Just as in the Garden of Eden, disallowing something turns it into forbidden fruit. Similarly, when high school students are told not to smoke, it makes them want to smoke more. Interestingly, however, telling the same teens they *should* smoke actually makes them want to smoke *less*.⁴⁶² No matter what the message is, dictating which decisions adolescents should make about their health makes them want to do the opposite.

Nobody knows how teenagers like to reject authority better than cigarette manufacturers, which helps explain why they run youth anti-smoking campaigns. Almost everyone who smokes as an adult begins in their teens.⁴⁶³ Would a \$600 billion industry really make ads that hurt its bottom line?

Anti-smoking ads created by tobacco companies do not convince people not to smoke.⁴⁶⁴ These ads actually increase smoking in children⁴⁶⁵ and make young people think more positively about tobacco companies.⁴⁶⁶ That these ads do the opposite of their supposed purpose is no

accident. Cigarette manufacturers have created some of the most persuasive marketing campaigns in history and know exactly what they are doing.

Decades ago, anti-smoking experts told them to avoid certain tactics, such as specifically telling kids not to smoke, or saying that smoking is uncool or for adults only.⁴⁶⁷ This was good advice,⁴⁶⁸ but the tobacco industry went directly against it. Instead, they used the opposite of these recommendations as a blueprint to craft the most deceitful “anti-smoking” messages possible. One major slogan: “You can be cool and not smoke,” a message which reinforces the underlying idea that smoking is an easy way to be cool. It may as well say, “You don’t *have* to smoke to be cool, but it sure helps.” Another: “Tobacco is whacko, if you’re a teen,” a message that suggests smoking is fine for adults, which teens desperately want to be.

Forbidding something cool is the perfect recipe for piquing adolescent interest. Unfortunately, this is exactly what most Abstinence-Only messages did. Decades of marketing convinced entire generations that smoking was cool. Sex needed no such help, but it got it anyway from countless television shows, movies, magazines, and songs.

For a campaign promoting abstinence to work, it couldn’t follow the same pattern as anti-smoking ads, or else it would result in the same boomerang effect. A successful message couldn’t just tell teens not to have sex, since they don’t like being told what to do. It couldn’t tell them that premarital sex is uncool, since teens also don’t like being told what to think. And it couldn’t tell them sex is only for adults, since they don’t like being treated like children.

Despite the challenges, however, media campaigns are not doomed to fail.⁴⁶⁹ People can be persuaded to make better choices about their health, but they have to be asked in the right way.⁴⁷⁰ The key word here is “choices.” To avoid reactance, a campaign must make people feel that all decisions are ultimately their own. The trick to preventing the boomerang effect is to respect the audience. Neither Safe Sex nor Abstinence-Only did this, which is why young people did not pay as much attention to them as they did to Gaga’s message. Instead of treating them with respect, both previous strategies underestimated teens and patronized them.

SEX, LIES, AND CONDESCENSION

Abstinence-Only treated students as unable to make their own decisions, asking them to replace their own judgment with an unconditional “no.” The Safe Sex approach skipped the choice altogether, assumed most teens could not be abstinent, and jumped right to maintaining public health.

Safe Sex also assumed young people would shy away from anything difficult, so it presented condoms as easier to use than they actually are. On the other hand, Abstinence-Only acted as if refraining from sex were simple, encouraging teens to trust their well-being to a rule that hardly anyone was able to follow.

Safe Sex ignored the power of personal values, which was the main reason teens remained virgins.⁴⁷¹ Abstinence-Only, on the other hand, said premarital sex was wrong, an idea with which few people agreed,⁴⁷² and one that was based in religion, which is problematic in a nation as diverse as America.⁴⁷³ Public health messages are counterproductive to people who disagree with their

underlying ideology,⁴⁷⁴ and repeating them just makes it worse.⁴⁷⁵

Treating teens with such little respect did not help either cause. Ask any teacher: Young people can smell insincerity and hypocrisy a mile away, and when they do, they shut down. In a *Washington Post* article titled “They’ll Abstain If They’re Given Good Reasons,” a 30-year sex education veteran said:

*Once they realize that what adults are telling them is in any way disingenuous, they stop listening, no matter how good that advice may be.*⁴⁷⁶

Adolescents, particularly high school students, are more perceptive than adults think they are. They readily spot false data and bad arguments, and they resent being controlled or kept in the dark. Given enough information, they can and will form logical and beneficial conclusions about their health.⁴⁷⁷ Safe Sex and Abstinence-Only, however, told just one side of the story, but teens wanted to hear both. In 2010, a national survey asked teens which type of sexual health strategy they wished they could learn more about. Only about one in ten wanted more information about just abstinence, and only about two in ten wanted to hear more about just birth control. The largest group by far wanted to learn more about both.⁴⁷⁸

Even though teens outwardly reject authority, they inwardly crave guidance. In that same survey, nine out of ten teens said that they should be given a strong message to wait at least until after high school to have sex. The survey also showed that, despite the assumptions Safe Sex and Abstinence-Only made about them, teens care more about healthy relationships than sex. Again, nine out of ten

said they would prefer to have a boyfriend or girlfriend but not have sex, as opposed to having sex but not having a relationship.⁴⁷⁹

LEADING, NOT COMMANDING

Lady Gaga knew exactly how teens thought, in part because she was not far from being one herself. It is easy to forget this fact now that “Mother Monster” is old enough to be a grandmother, but Gaga began recording her first multiplatinum album when she was only 21, and she released *Born This Way* just a few years later. One of the reasons the Slow Down Project was so successful with young people was that Gaga knew how to talk to them.

She did not presume to say what was best for them or tell them how they should live their lives. Instead, Gaga said she wanted to beat a disease, and she asked them to join her. Inviting people to walk beside you is a world apart from commanding them to follow and obey, especially when trying to influence young people. Gaga respected them enough to challenge them with a difficult goal, but did not say they were morally wrong if they did not comply.

Furthermore, Gaga rode a fine line, giving strong guidance without seeming like an overprotective parent. *Slow Down*, like the traffic sign after which its album cover was modeled, was a reasonable request for caution. By comparison, for teens, Safe Sex was a green light at the onramp to a dangerous freeway. On the other hand, Abstinence-Only looked like a thousand stop signs on a long, deserted road. *Slow Down* was a warning sign; it did not tell people to stop or go. Instead, it prompted them to pay attention to potential danger ahead, and it did so in a way that caught their attention.

Gaga's movement was empowering because she didn't tell people exactly what to do, but trusted them to make the right decision if they just used more of their own judgment. She avoided the boomerang effect because she requested cooperation instead of demanding obedience. This made the Three Month Rule come across as good advice from a peer rather than an order from an out-of-touch authority figure.

Slow Down made teens feel mature because it gave them the same advice as adults: It asked everyone to think more about what they are doing. Gaga did not talk down to young people, and being treated with such respect struck a chord with them. After all, one of the primary reasons adolescents engage in any problem behavior, like smoking, drinking, or having sex, is specifically to feel or appear more mature.⁴⁸⁰

Both of the previous strategies only made this worse by reinforcing the idea that sex is a mark of maturity. Safe Sex said that responsible adults use protection when having sex, while Abstinence-Only locked sex behind the distant future of marriage. Rather than focusing on sex itself, Gaga said that true maturity means taking responsibility for our own decisions. The Three Month Rule forced people to privately answer some hard, unspoken questions: If I have serious doubts that a relationship would last three months, is it even worth pursuing? What about partners who won't wait a few months? What does that say about how they really feel about me? Is sex with someone who won't wait a good idea?

Gaga made asking these questions seem like the adult thing to do. This meant that rushing into sex, by comparison, seemed juvenile, reversing decades of social

stereotypes. Years ago, students who chose to remain virgins in high school were viewed as immature among their peers. Today, those who follow the Three Month Rule are seen as smart and independent thanks to Gaga, who finally broke through to young people by treating them with respect.

REASON #3: GAGA LEVERAGED HER STAR POWER

Gaga made it cool to wait, something that parents and sex education teachers could never do because they were hopelessly out of touch with the lives of teens. Parents thought they had done a good job keeping their children from having sex. Part of their overconfidence was human nature: Just as we think we are different from everyone else, we also think that our children are different, too.⁴⁸¹ Along those lines, parents thought that teen life in general revolved around sex, but that this didn't apply to their own children, whom they still saw as innocent and naïve.⁴⁸²

Most of them were wrong, though. About three-quarters of parents of sexually experienced early teens mistakenly thought their children were still virgins. And even though most students had sex by their junior year in high school, most of their parents had no idea.⁴⁸³

Parents thought they had done a good job talking to their children about sex, but the facts told a different story. In one survey, nine out of ten parents of teens said that they had led a helpful parent-child conversation about delaying sex and avoiding teen pregnancy. However, when asked the same question, teens were three times as likely as parents to say this had never happened.⁴⁸⁴

Furthermore, four out of five teens said it would be much easier to postpone sex and avoid pregnancy if they could have open, honest conversations about these topics with their parents.⁴⁸⁵ But even when parents did discuss sex with their children, it was frequently too little, too late. One study found that even among fairly affluent, educated parents, 40 percent didn't talk about sex until after their children had already begun having it.⁴⁸⁶

Parents were more influential than they realized,⁴⁸⁷ but talking about sex was uncomfortable, and all too often they passed the buck to the school system, which unfortunately was less influential than they thought. Educators did not know how to communicate effectively with teens, largely because those responsible for developing and teaching sex education courses were products of another era. Society had changed radically since they were young, and social norms were not what they used to be.

This generation gap left adults with misguided ideas about both major sex education strategies. Many adults thought that Safe Sex sent a mixed message that could encourage students to have sex. While this might have been true for parents, it wasn't true for their kids.⁴⁸⁸ Abstinence-Only suffered a similar fate. The cornerstone of the approach was the idea that premarital sex was wrong, but that argument fell flat because American society didn't feel that way anymore. In the 1970s, most people did think premarital sex was wrong, but by the end of the 1990s, fewer than three in ten thought that way. On the contrary, most young people thought it was a good idea for people to live together before marrying,⁴⁸⁹ and only one in ten teens felt sure he or she would get married without living with someone beforehand.⁴⁹⁰ Times had changed, and it was

hard to make a moral argument against something that society generally accepted.⁴⁹¹

The same parents who didn't even talk to their children about sex got up in arms about which type of sex education was taught in school. Yet they would have been better off worrying about what their children learned at home, because there is a huge difference between how convincing such messages seem and how much they actually change behavior.⁴⁹² Telling people how to run their lives only seems persuasive to people who already agree with the advice, and annoys those who don't.⁴⁹³ In fact, for all the bluster on both sides of the Safe Sex vs. Abstinence-Only debate, neither approach made very much impact. Even the most successful programs only made small changes; many made none at all.⁴⁹⁴ Plus, regardless of the material they were supposed to teach, sex education teachers were no different from other adults in that they still treated teens as being too immature to know about sex, and it showed in their lessons.⁴⁹⁵

Experts did not know how to get through to young people, but what they did know is that teens paid more attention to the media than to stodgy academics like themselves. One team found that dramatic television shows about teen pregnancy were far more persuasive than the format used by sex education classes.⁴⁹⁶ Another researcher who studies social movements and substance abuse said:

*Rap music is like CNN for black teens. But much of what is discussed in rap is in code. The kids understand, but parents don't.*⁴⁹⁷

Since young people paid so much attention to music and pop culture, who better to lead a revolution than Gaga?

YOUNG PEOPLE LISTENED TO GAGA

It is difficult to overstate the magnitude of Gaga's superstar status. Since she has been a global trendsetter in music and fashion for over 30 years, it's easy to forget how much sway she had when she was just starting her career. A month after she turned 24, *Time* listed Gaga as one of the world's most influential people; by one measure, she was second only to then-President Barack Obama.⁴⁹⁸ A year later, *Forbes* named her the most powerful celebrity in the world.⁴⁹⁹

Gaga was a cultural juggernaut, which put her in a powerful position to effect change. Fortunately, unlike many who achieved stardom, she took responsibility for her fame. In a 2010 interview, she said:

When you're in the public eye, you're a role model whether you want to be or not. And I want to be. I'm not one of those self-obsessed artists who don't care about their fans. It's not just about the music. I look out ... and there are eighteen thousand screaming young people and I have a responsibility to them – and you're an idiot if you don't know that.⁵⁰⁰

After *Born This Way*, Gaga had reached a point where no matter what she produced, it would have been a hit. Instead of resting on her laurels, she challenged herself, and used her position to put a socially beneficial message at the top of the charts. Gaga could have made anything cool. Luckily for us, she chose sexual responsibility.

When teachers and religious leaders told them to rein in their behavior, many young people were skeptical and resisted. But when Gaga asked, they responded with enthusiasm, and her authenticity was unquestioned because she had been championing the cause for years.

Like many other celebrities, she helped raise money for AIDS charities⁵⁰¹ and frequently performed at benefits,⁵⁰² but she also used her singular ability to command the media to call attention to social issues. In 2011, for example, in a stunt only she could have pulled off, Gaga wore a full-body “latex-condom-inspired outfit” to appear on *Good Morning America* to raise AIDS awareness.⁵⁰³ Later that same year, she wore a black veil and 16-inch heels to tower over President Obama when she spoke to him about preventing bullying.⁵⁰⁴

The older generations, who saw only her outlandish clothing and didn’t listen to her music, were skeptical about the star’s sincerity. However, years before *Slow Down*, Gaga had already frequently gone out of her way to bring up sexual responsibility in interviews:

...you should wait as long as you can to have sex...⁵⁰⁵

If you can’t get to know somebody, you shouldn’t be having sex with them ... in this day and age, we have grown up and we now know that we can’t be that free with your love.⁵⁰⁶

I’m single right now and I’ve chosen to be single because I don’t have the time to get to know anybody. So it’s OK not to have sex, it’s OK to get to know people. I’m celibate, celibacy’s fine ... Something I do want to celebrate with my fans is that it’s OK to be whomever it is that you want to be. You don’t have to have sex to feel good about yourself, and if you’re not ready, don’t do it ... it’s not really cool any more to have sex all the time. It’s cooler to be strong and independent.⁵⁰⁷

SHARING HER FORTUNE OF FAME

Gaga made her movement work by shrewdly using her position as a media superstar. Before anyone wonders why

other celebrities have not achieved similar success with their own pet causes, it is important to recognize why what she did was so different.

First, Gaga followed through with more than a few casual comments at an awards show. She didn't just try to promote awareness about a problem. She had a solution, a new idea, and she didn't just talk about it, she took action. Instead of treating the Slow Down Project as a side project, she dedicated her career to her cause. For years, the press could not even mention Lady Gaga without talking about the Three Month Rule.

More importantly, while Gaga truly believed in her cause, she knew that despite her fame, no single artist could reach enough people to start a sustainable movement. By working with a wide variety of different musicians, she ensured that the message, rather than herself, took center stage. She recorded songs with other contemporary pop singers, like Katy Perry and Justin Timberlake, and also with popular artists from other genres, like Taylor Swift and Jay-Z, who reached the core audience of young people immediately. Furthermore, she collaborated with living legends like Billy Joel, Neil Diamond, and Paul McCartney, helping these talented songwriters re-enter the charts and introducing them to a new generation of listeners. Few throughout history have had the gravitas to draw in so many A-list celebrities, but between her popularity and the cause she was promoting, getting to share Gaga's spotlight was an opportunity few could pass up.

Everyone who participated in the Slow Down Project got their music played on new radio stations and heard by people who had never listened to them before. This not only boosted everyone's sales, but also gave Gaga's

message incredible reach. No matter how old they were or what type of music they listened to, virtually everyone heard *Slow Down* in one form or another, whether they liked Lady Gaga or not. In fact, many people did not even associate the movement with Gaga. To rap fans, it was Kanye West's movement. To country fans, it was Toby Keith's. With all she did, it is easy to overlook that Gaga never even made her own version of *Slow Down* (at least not one with lyrics). The greatest expression of her musical genius was making an anthem that worked across multiple genres, then letting others make it their own.

This is why the Slow Down Project worked so much better than public service announcements. Most musicians who lend their celebrity to PSAs end up producing stilted ads that prompt young people to roll their eyes, not change their behavior. With Gaga, though, artists stuck to what they were best at: making music. Unlike PSAs, the message was not tuned out along with the rest of the ads played between songs. The songs were the message, and fans requested them, sang along, made their own versions, and shared them with friends. Whether sung by their favorite artist on the radio or by a classmate on Facebook, people heard *Slow Down* from someone they identified with. This made young people more receptive, and many who had previously rejected the idea of waiting took it to heart.⁵⁰⁸

These dynamics did not have nearly as much effect on older people, who were not as influenced by new music or social networking applications. This helps explain the unfortunate fact that the movement never caught on outside the youngest generation, which was a larger problem than many realized at the time. Thanks largely to the wide availability of erectile dysfunction drugs, people

were staying sexually active well into their eighties,⁵⁰⁹ but they were doing so very irresponsibly. People over 50 rarely used condoms,⁵¹⁰ and among all age groups, were the least likely to get tested or know their HIV status.⁵¹¹ They rarely talked to their doctors about sex, but they were most likely to have sexual health problems that amplified the risk of HIV.⁵¹² To top it off, they knew very little about the virus and didn't think they were at risk.⁵¹³

Despite the fact that it was soaring among people over 50,⁵¹⁴ older Americans simply didn't care very much about HIV.⁵¹⁵ All in all, they were set in their very risky ways and they weren't about to change because of something Lady Gaga said. Young people, on the other hand, decided to take responsibility for their actions,⁵¹⁶ and made living by the Three Month Rule a personal goal. Ultimately, this helped them make better decisions,⁵¹⁷ even when it meant putting off something they wanted for a little while.⁵¹⁸ On average, the few people who contract HIV today do so at a much older age than 30 years ago, which, combined with advances in medicine, is why AIDS, once thought of as a gay disease,⁵¹⁹ then later a black disease,⁵²⁰ is now thought of as a senior citizen's disease, and is quickly dying out.

REASON #4:

A SMALL WAIT MAKES A BIG DIFFERENCE

In the end, the cumulative effect of all those short waits turned out to be larger than anyone could have guessed. Anyone but epidemiologists, that is.

Despite the best efforts of educators (and longwinded writers), people oversimplify ideas. They ignore the fine

details and remember only the concepts that make the idea unique.⁵²¹ If you had to sum up the concept of Safe Sex in three words, you might say: “Use a condom.” Likewise, Abstinence-Only becomes: “Wait until marriage.” By comparison, modern sex education seems complicated. To recap, the AWAKE method consists of five rules:

Illustration: AWAKE Method



Although Gaga advocated all five of these guidelines, people stripped her message down to the bare essentials right from the start as well. Four of the ideas were already familiar, since various groups reinforced them constantly. Parents and religious leaders taught abstinence and fidelity, and public health campaigns promoted STD testing and condoms. This left the Three Month Rule as the most unique part, and it became the essence of the idea. Boiled down to just a few words, the heart of the movement came across as: “Wait three months.” Fortunately, that was good enough.

All people had to do was follow the “wait” part and the rest came naturally. The delay gave couples ample time to get tested and discuss contraception, and also gave casual

relationships the opportunity to burn out before they became physical. For those who did eventually have sex, waiting let them build a closer bond beforehand, which strengthened the relationship and lowered the chances of infidelity. The side effects of waiting reached much further than that, though.

Thirty years ago, despite numerous public health initiatives, America was making little headway against the spread of HIV. Before Gaga introduced the Three Month Rule, the number of new annual cases had remained the same for 20 years.⁵²² We were not winning the war against AIDS, yet some of the people affected the most by the disease were the least concerned. A team of researchers who visited six US cities to interview thousands of young MSM found that half the men who had HIV, but didn't know it, thought they were at low risk.⁵²³ In response to their findings, the CDC said:

Even more troubling are studies showing that some of the populations with the highest rates of infection (including men who have sex with men and African Americans) either do not recognize their risk or believe HIV is no longer a serious health threat.⁵²⁴

People had stopped caring, and we had been stalled for two decades. Then, immediately after Gaga released *Slow Down*, the number of new annual cases of HIV started to drop.

Exactly how did a pop singer help turn the tide in the battle against an incurable disease? The answer to this question lies not in music, but in math.

THE WISDOM TO KNOW THE DIFFERENCE

Epidemiologists use mathematical models to describe how diseases affect a population. These allow scientists to do everything from predict how serious this year's flu season will be, to explain how the bubonic plague wiped out over a third of Europe in the 14th century.⁵²⁵ The equations that make up these models show how different variables interact to affect the spread of a disease. For example, an equation used to calculate the impact of an airborne bacteria might include its ease of transmission and the average number of healthy people each infected person comes into contact with. One of the most important purposes of these models is to help prevent epidemics. In the previous example, if the bacteria were determined to be particularly contagious, experts might advise people to wear masks or stay at home, if possible, to limit their exposure. Unfortunately, HIV's unique blend of properties makes it very different from other diseases, and many of the variables that make it so difficult to contain are beyond anyone's control.

To begin, one of the key factors that affects how a disease spreads is the incubation period, that is, the length of time between when a person gets infected and when symptoms begin to appear. Although unpleasant, these symptoms are useful because they let carriers know they should seek treatment and warn healthy people to be more careful around them. Whereas viruses that cause the common cold make themselves known within hours,⁵²⁶ HIV typically takes about ten years to develop into AIDS, giving it one of the longest incubation periods of all infectious diseases.⁵²⁷

Another important variable is the length of time a person can pass an infection on to others. Those with a cold, for

instance, are typically most contagious for a few days, and are completely healthy within a few weeks.⁵²⁸ More serious diseases don't go away on their own, but even chlamydia is cleared up a week after taking antibiotics.⁵²⁹ However, HIV is incurable. This means that, unlike most other infections, once people contract it, they can spread it to others for the rest of their lives.

Furthermore, due to advances in antiretroviral drug therapy, many HIV-positive people in developed countries like the United States were living longer than ever,⁵³⁰ nearly as long as if they didn't have the disease.⁵³¹ While this was great news for individuals with HIV, from a public health perspective, it also complicated the eradication of the virus. Extending carriers' lives meant lengthening the period of time during which they could infect others. Even though drug therapy reduced the chances of this happening,⁵³² regrettably, many continued having unprotected sex even though they knew they had HIV.⁵³³

Being incurable and largely invisible made HIV a formidable opponent, forcing prevention strategies to focus on what people could actually control: their own decisions. Abstinence-Only promoted the only surefire way to avoid getting HIV through sex, and Safe Sex offered a low-risk alternative. Either approach would have worked in theory, but neither persuaded enough people.

On the other hand, asking them to wait a few months was a much easier sell, and far more people complied. On its own, the Three Month Rule could not offer an impressive level of clinically-proven protection like abstinence or condoms. As the mathematics of epidemiology help explain, though, convincing many people to wait made an enormous impact on curbing the spread of HIV.

HOW HIV WAS BEATEN, BY THE NUMBERS

When epidemiologists study an outbreak of a disease, one of the most important values they calculate is the “basic reproductive ratio,” or R_0 , which is essentially the number of healthy people to whom the average infected person will spread the disease.⁵³⁴ This ratio determines whether the outbreak will end on its own, hold constant, or become an epidemic.

If R_0 is exactly one, it means that each person carrying the disease infects, on average, one and only one other person. When this happens, a disease is said to be endemic, or self-sustaining in a steady state. A good example of an endemic disease in the United States was chicken pox until the mid-1990s. For decades before a vaccine was developed, about the same amount of young people got chicken pox each school year. The disease was not an epidemic, but it also wasn’t going anywhere.⁵³⁵

When R_0 is less than one, it means that people are not spreading the disease enough to sustain it, so it will eventually die out on its own. On the other hand, when R_0 is greater than one, it means that each infected person typically spreads the disease to more than one other person. The total number of infected people continually grows, forming the scientific definition of an epidemic.

To slow the spread of a disease, R_0 must be reduced. The exact amount it must be reduced to end an epidemic can be calculated with this equation:

Illustration: Equation A – Critical efficacy of an intervention⁵³⁶

$$p_c = \frac{R_0 - 1}{R_0} = 1 - \frac{1}{R_0}$$

p_c : critical efficacy of intervention

R_0 : basic reproductive ratio

The key idea to understand about the formula is that the success of a public health campaign depends entirely upon its ability to affect a single variable: R_0 .

This ratio varies widely among different socioeconomic groups,⁵³⁷ and calculating a precise value for R_0 can take into account dozens of complicated variables, ranging from the probability of contact between different age groups to seasonal effects on behavior.⁵³⁸ For our purposes, however, the exact number is not crucial; what is most important is that the number needed to be reduced. Therefore, we can use a simplified method of calculating R_0 for HIV:

Illustration: Equation B – Basic reproductive ratio for HIV⁵³⁹

$$R_0 = \beta c D$$

R_0 : basic reproductive ratio

β : transmission probability

c : rate of sexual partner change

D : duration of infectiousness

In plain English, this equation means that the number of people each person with HIV typically infects is the product of three variables: The chance to transmit the virus through sex, the amount of contact with HIV-negative people, and the time during which the virus could be transmitted. Lowering the value of any of those three variables would decrease R_0 . Following the Three Month Rule, as it turns out, dramatically reduces all three.

First, waiting reduces the transmission rate by improving communication between sexual partners. The most effective way to reduce the chance of transmission during sex is to use a condom; however, before the Rule, most young people didn't even discuss contraception before having sex. Waiting gives them more time to talk about condoms and plan ahead, which makes them far more likely to actually use one.⁵⁴⁰

Another factor that affects the transmission rate is the presence of another sexually transmitted disease, especially those that cause ulcers.⁵⁴¹ For instance, genital herpes (HSV-2) multiplies the risk of HIV transmission by three times.⁵⁴² Waiting gives couples more time to get tested before they have sex, and not just for HIV, but for other STDs as well, and also gives these other diseases time to develop symptoms before a carrier unknowingly passes it on to a partner.

Second, following the Three Month Rule reduces the frequency with which people change sexual partners. Waiting three months limits people to a maximum of four partners per year, a number sometimes attained in a month of college hookups during the early 2000s.⁵⁴³ (In practice, those following the Rule don't even come close to this number.) This eliminates casual sex between people

who are not dating, reducing the number of healthy people exposed to each HIV-positive person.

The Rule also helps those who are uninfected remain that way. As stated earlier, waiting longer builds longer lasting, more satisfying relationships. As a result, following the Rule leads not only to fewer new partners, but also less infidelity, meaning a lower chance of bringing the virus into what the other partner thought was a monogamous relationship. These changes also had a considerable impact, since the practice of having more than one partner at once exponentially increases the spread of HIV.⁵⁴⁴

Finally, waiting affects the timing of sexual activity, which makes more of a difference than most people realize. HIV consists of three main stages, during which the viral load, that is, the concentration of the virus in the body, changes greatly.⁵⁴⁵ This is important because the greater the concentration of the virus, the greater the risk of transmitting the disease. In fact, in one study, no risk factor predicted the transmission of HIV through heterosexual sex more accurately than viral load – not frequency or type of sexual activity, not the use of condoms, not even whether the infection had progressed to AIDS.⁵⁴⁶

Shortly after infection, the virus replicates rapidly. During this first stage, people often experience flu-like symptoms, like fever and fatigue, which last less than two weeks.⁵⁴⁷ The viral load soon drops sharply though, and within two months, it falls about 99 percent from its peak.⁵⁴⁸ This marks the beginning of the second stage, during which people experience no symptoms and the viral load remains relatively stable at a lower level, making transmission more difficult. Untreated, this stage typically lasts about ten

years⁵⁴⁹ before progressing to the final stage, AIDS, after which most people do not survive more than a few years.⁵⁵⁰

Over the course of the disease, the viral load rises again, but it never reaches the level seen at the beginning. It peaks in the period between the third and eighth week after initial infection, during which scientists estimate the virus to be eight to 26 times more likely to be transmitted than during the second stage. It may be hard to believe, but having sex with an HIV-positive person during these first few weeks is several times more likely to result in an HIV infection than having sex with an obviously sick person who is about to die from the advanced stages of AIDS.⁵⁵¹

People seem healthy, but aren't. This lack of symptoms is one of the factors that made HIV so difficult to control. Before the Three Month Rule, most HIV infections in the United States were transmitted by people who didn't know they had the virus, a major factor driving the epidemic.⁵⁵² This high ratio can be explained by the following equation:

Illustration: Equation C – Presymptomatic infection ratio⁵⁵³

$$\theta = \frac{\int_0^{\infty} \beta(\tau)S(\tau)d\tau}{\int_0^{\infty} \beta(\tau)d\tau}$$

θ : ratio of infections before symptoms develop

$\beta(\tau)$: infectiousness, function over time

$S(\tau)$: improbability of symptoms, function over time

This equation simply states that the number of people who catch a disease from those who show no symptoms

depends upon the infectiousness of the disease and the chance of symptoms showing, both of which are complex variables that change over time.⁵⁵⁴ The higher this ratio, the harder an outbreak is to control. This helps explain why deadlier diseases like SARS and smallpox outbreaks have been easier to contain than the flu.⁵⁵⁵

For HIV, danger was most concentrated in the first stage: When people had the lowest chance of knowing they were HIV-positive, yet infectiousness was at its highest. As would be expected, before the Three Month Rule, a disproportionate amount of HIV infections occurred during this time.⁵⁵⁶ However, Gaga's movement added a new variable to the equation: The probability of having sex at a given time in relation to becoming infected. People who follow the Rule avoid sex during the first stage of HIV, which counteracts the spike in risk during this dangerous period and reduces the spread of the disease yet again.

The final reason that the Slow Down Project worked so well came down to math. The success of any effort to contain an epidemic is completely dependent on reducing the basic reproduction rate, which, in turn, is the product of three complex variables. Following the Three Month Rule reduces all three of them at the same time, which compounds the benefits and makes even small changes exponentially more effective. All these improvements added up. With how long the annual rate of new infections had remained in a delicate balance, the total change was more than enough to tip the scales, turning an epidemic into a disease that experts predict will soon be rare in developed countries.⁵⁵⁷

CONCLUSION

Making headway against an incurable disease after 20 years of running in place was no minor feat. This is why, above all her other accomplishments, history will remember Lady Gaga as a crusader in the war against AIDS, one who fought by using a microphone instead of a microscope.

In many ways, a good idea is a lot like a deadly virus. They both move from person to person and throughout a population in remarkably similar patterns,⁵⁵⁸ and neither will survive long unless they reach enough people and become self-sustaining. Often the original source is difficult to pinpoint, but in this case, it is clear. Gaga spread her idea throughout the entire music industry, using her superstar status to share a new message with millions. She created an epidemic of her own by giving a new idea the strong enough start it needed to infect an entire generation.

She asked people to join her, she showed them how responsibility could be empowering, and she got them to make her cause their own. Ultimately, she convinced them to rethink casual sex, and to wait a little longer before hopping into bed with someone new. While fighting HIV was her primary goal, we can't lose sight of all the other ways this helped. Today, crime continues to fall, abortion is rare, and most of us are happier with our relationships and our love lives. All because we listened when she told us to "slow down and think about it."

AUTHOR'S NOTE: THANK YOU

Thank you very much for taking the time to read this book; I hope you enjoyed it. If you did, you may want to read other books in the *Tales from 2040* series:

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ENDNOTES

1. Meghan O'Rourke. (2007) "Diamonds Are a Girl's Worst Friend." Slate. Jun. 11, 2007. [Link](#)
2. Edward Jay Epstein. (1982) "The Rise and Fall of Diamonds: The Shattering of a Brilliant Illusion." Simon & Schuster. New York, NY.
3. Martin Meredith. (2007) "Diamonds, Gold, and War: The British, the Boers, and the Making of South Africa." PublicAffairs. New York, NY.
4. Janine Roberts. (2003) "Glitter & Greed: The Secret World of the Diamond Cartel." The Disinformation Company. New York, NY.
5. James Twitchell. (2001) "Twenty Ads That Shook the World: The Century's Most Groundbreaking Advertising and How It Changed Us All." Three Rivers Press. New York, NY.
6. Janine Roberts. (2003) "Glitter & Greed: The Secret World of the Diamond Cartel." The Disinformation Company, New York.
7. Edward Jay Epstein. (1982) "The Rise and Fall of Diamonds: The Shattering of a Brilliant Illusion." Simon & Schuster. New York, NY.
8. Janine Roberts. (2003) "Glitter & Greed: The Secret World of the Diamond Cartel." The Disinformation Company, New York.
9. Edward Jay Epstein. (1982) "The Rise and Fall of Diamonds: The Shattering of a Brilliant Illusion." Simon & Schuster. New York, NY.
10. In 1999, Advertising Age magazine named "A Diamond Is Forever" the best advertising slogan of the twentieth century. Second place: Just do it (Nike). Complete list:
Advertising Age. (1999) "Ad Age Advertising Century: Top 10 Slogans." Mar. 29, 1999. [Link](#)
11. Jacki Lyden, Michael Montgomery. (2001) "With this Ring: Following the International Diamond Trail." Part I. American RadioWorks. Nov. 2001.
12. Janine Roberts. (2003) "Glitter & Greed: The Secret World of the Diamond Cartel." The Disinformation Company. New York, NY.
13. Meghan O'Rourke. (2007) "Diamonds Are a Girl's Worst Friend." Slate. Jun. 11, 2007. [Link](#)
14. Median wage in 2009 for those 16 or older with a non-zero income: \$29,050. (Males only: \$34,625.)
US Census Data. (2011) "2005-2009 American Community Survey." Table S2001. United States Census Bureau. Washington, DC. [Link](#)
Reported average ring prices varied greatly between sources.
Average price in 2007: \$4,500. 2008: \$3,180. 2009: \$2,900.

Cheryl Tan. (2009) “Wedding, Engagement-Ring Spending on the Decline.” The Wall Street Journal. Jan. 28, 2009. [Link](#)

Average price: \$3200.

Meghan O’Rourke. (2007) “Diamonds Are a Girl’s Worst Friend.” Slate. Jun. 11, 2007. [Link](#)

Average price: \$2,100.

Staff Reporter. (2007) “It’s a Wedding, Wedding World!” People. Jul. 13, 2007. [Link](#)

The Knot Real Weddings Survey of over 21,000 US couples married in 2009 reported the average price to be \$5,487, but it was not a random sample. Another popular source reports an even higher figure, but it comes from the diamond industry, which is motivated to report a high number and does not reveal its method or data.

15. “The Three-Date Rule is a dating rule of thumb which states that the third date is a milestone in determining whether a woman will consent to sexual intimacy.”

Wikipedia. (2011) “Three-Date Rule.” Jul. 7, 2011. [Link](#)

The concept is widely supported in popular culture.

“There is currently only one broadly accepted rule of courtship: The Third Date is The Date (unless, of course, you’re a glued-together-at-the-knees *Rules* girl). If either party declines sex on the Third Date, it’s a clear sign that the relationship is going nowhere.”

Elizabeth Austin. (2003) “Three Dates and You’re in Bed.” The Washington Monthly. Jun. 2003. (Reprinted in UTNE Reader, Sep./Oct. 2003.) [Link](#)

“...as a gentleman you should assume ‘no sex’ on the first two dates but be prepared for it on the third...”

Lawrence Mitchell. (2007) “The Importance of the Third Date.” AskMen. [Link](#)

“...it’s apparent the three-date milestone still retains its significance.” Also, in a poll, 60% said they would have sex by the third date or sooner.

Margot Carmichael Lester. (2005) “Is the Three-Date Rule in Effect?” MSN. Dec. 12, 2005. [Link](#)

16. Lawrence Finer, Stanley Henshaw. (2006) “Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001.” Vol. 38, No. 2, pp. 90-96.
17. Rachel Jones, Kathryn Kooistra. (2008) “Abortion Incidence and Access to Services in the United States, 2008.” Perspectives on Sexual and Reproductive Health. Vol. 43, No. 1, pp. 41-50.
18. Author’s Note: This is not to say that disease is a larger problem than unplanned pregnancy; merely, all things held constant (including male

fertility), the rate of pregnancy for a female would be roughly the same given a certain frequency whether it was with a single partner or several, but the risk of disease would be exponentially higher with several partners.

19. Centers for Disease Control and Prevention. (2010) “Trends in Sexually Transmitted Diseases in the United States: 2009 National Data for Gonorrhea, Chlamydia and Syphilis.” Centers for Disease Control and Prevention. Atlanta, GA. [Link](#)
20. Hillard Weinstock, Stuart Berman, Willard Cates, Jr. (2004) “Sexually Transmitted Diseases among American Youth: Incidence and Prevalence Estimates, 2000.” Perspectives on Sexual and Reproductive Health. Vol. 36, No. 1, pp. 6-10.
21. John Santelli, Theo Sandfort, Mark Orr. (2008) “Transnational Comparisons of Adolescent Contraceptive Use: What Can We Learn from these Comparisons?” Archives of Pediatric Adolescent Medicine. Vol. 162, No. 1, pp. 92-94.
 Elise Jones, Jacqueline Darroch Forrest, Noreen Goldman, Stanley Henshaw, Richard Lincoln, Jeannie Rosof, Charles Wesloff, Deirdre Wulf. (1985) “Teenage Pregnancy in Developed Countries: Determinants and Policy Implications.” Family Planning Perspectives. Vol. 17, No. 2, pp. 53-63.
22. Increase in reported chlamydia is also due to increased testing.
 Centers for Disease Control and Prevention. (2010) “Trends in Sexually Transmitted Diseases in the United States: 2009 National Data for Gonorrhea, Chlamydia and Syphilis.” Centers for Disease Control and Prevention. Atlanta, GA. [Link](#)
23. UNAIDS. (2011) “AIDS at 30: Nations at the Crossroads.” Joint United Nations Programme on HIV/AIDS. Geneva, Switzerland. [Link](#)
24. Lucia Torian, Mi Chen, Philip Rhodes, H. Irene Hall. (2011) “HIV Surveillance --- United States, 1981—2008.” Morbidity and Mortality Weekly Report (MMWR). Vol. 60, No. 21, pp. 689-693. Centers for Disease Control and Prevention. Atlanta, GA. [Link](#)
25. From the overview: From 2006 through 2008, the largest percentage increase in the number of persons living with HIV infection was among persons aged 60-64 years.
 Centers for Disease Control and Prevention. (2011) “Diagnoses of HIV Infection and AIDS in the United States and Dependent Areas, 2009.” US Department of Health and Human Services. HIV Surveillance Report. Vol. 21. [Link](#)
26. UNAIDS. (2010) “UNAIDS Report on the Global AIDS Epidemic 2010.” Joint United Nations Programme on HIV/AIDS. Geneva, Switzerland. [Link](#)
27. This was rapidly improving in many areas. For example, the percentage of those using a condom during their last sexual encounter roughly doubled between 2002 and 2008.

Human Sciences Research Council. (2009) “South African National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2008: A Turning Tide among Teenagers?” HSRC Press. Cape Town, South Africa.

28. Homosexuality is illegal in over 30 African nations.

Saratu Abiola, Lynn Neary. (2010) “Homosexuality in Africa Is Still Taboo.” National Public Radio. Feb. 22, 2010.

Overview of punishments by country:

Wikipedia. (2011) “LGBT Rights by Country or Territory.” Wikipedia.com. Aug. 9, 2011. [Link](#)

Such harsh laws concentrate homosexual activity even more, leading to the rapid spread of disease. For example, in Kenya, where homosexual sex is illegal, 47% of MSM have HIV.

amfAR. (2008) “MSM, HIV, and the Road to Universal Access—How Far Have We Come?” The Foundation for AIDS Research. New York, NY.

29. “...according to a U.N. study ... 30 percent of young African women believe if a man looks healthy, he could not have AIDS...in some areas infected men ‘believe they can be cured by having sex with a virgin, and 12-year-old girls become infected.’”

John Christensen. (2000) “AIDS in Africa: Dying by the numbers.” CNN. [Link](#)

30. Account of a community in South Africa where the myth is prevalent:

B.L. Meel. (2003) “The Myth of Child Rape as a Cure for HIV/AIDS in Transkei.” *Medicine, Science, and the Law*. Vol. 43, No. 1, pp. 85-88.

Other sources indicate the virgin cleansing myth is not unheard of, but the primary motivating factor behind most virgin rape is that men seek uninfected partners.

Rachel Jewke, Lorna Martin, Loveday Penn-Kekana. (2002) “The Virgin Cleansing Myth: Cases of Child Rape Are Not Exotic.” *The Lancet*. Vol. 359, No. 9307, p. 711.

Rape was also a widespread problem in general.

Staff Reporter. (2010) “AFRICA: Mass Rape in Africa Ups HIV Spread.” Reuters/Health24. Oct. 1, 2010. [Link](#)

31. 70% figure from 2006 estimate for Malawi (70.7%) in:

UNAIDS. (2010) “UNAIDS Report on the Global AIDS Epidemic 2010.” Joint United Nations Programme on HIV/AIDS. Geneva, Switzerland. [Link](#)

90% figure from:

John Christensen. (2000) “AIDS in Africa: Dying by the numbers.” CNN. [Link](#)

32. Incidence .61 in 2001, .41 in 2009. Also: “Twenty-two countries in sub-Saharan Africa have reduced new HIV infections by more than 25 percent.” UNAIDS. (2010) “UNAIDS Report on the Global AIDS Epidemic 2010.” Joint United Nations Programme on HIV/AIDS. Geneva, Switzerland. [Link](#)
33. UNAIDS. (2011) “Global AIDS Response Continues to Show Results as a Record Number of People Access Treatment and Rates of New HIV Infections Fall by Nearly 25%.” Joint United Nations Programme on HIV/AIDS. UNAIDS. Geneva, Switzerland. Jun. 3, 2011.
34. There has been almost no change in the annual number of new HIV cases since 1991.
H. Irene Hall, Ruiguang Song, Philip Rhodes, Joseph Prejean, Qian An, Lisa Lee, John Karon, Ron Brookmeyer, Edward Kaplan, Matthew McKenna, Robert Janssen. (2008) “Estimation of HIV Incidence in the United States.” *Journal of the American Medical Association*. Vol. 300, No. 5, pp. 520-529.
35. Susheela Singh, Gilda Sedgh, Rubina Hussain. (2010) “Unintended Pregnancy: Worldwide Levels, Trends, and Outcomes.” *Studies in Family Planning*. Vol. 41, No. 4, pp. 241-250.
36. World Health Organization, Guttmacher Institute. (2011) “Facts on Induced Abortion Worldwide.” World Health Organization, Department of Reproductive Health and Research. Geneva, Switzerland.
Rachel Jones, Kathryn Kooistra. (2011) “Abortion Incidence and Access to Services in the United States, 2008.” *Perspectives on Sexual and Reproductive Health*. Vol. 43, No. 1, pp. 41-50.
37. Low-income women are four times more likely to have an unintended pregnancy.
Lawrence Finer, Stanley Henshaw. (2006) “Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001.” Vol. 38, No. 2, pp. 90-96.
Poor urban areas have HIV rates among heterosexuals similar to poor countries with AIDS epidemics like Ethiopia and Haiti.
Paul Denning, Elizabeth DiNenno. (2010) “Communities in Crisis: Is There a Generalized HIV Epidemic in Impoverished Urban Areas of the United States?” Centers for Disease Control and Prevention. Atlanta, GA.
38. United States was #63 out of 169 globally based on 2009 estimates.
Central Intelligence Agency. (2011). “HIV/AIDS Adult Prevalence Rate.” CIA World Factbook. [Link](#)
List of developed nations defined by:
International Monetary Fund. (2010) “World Economic and Financial Surveys: World Economic Outlook.” International Monetary Fund. Washington, DC.
39. Far higher than most developing nations.

Susheela Singh, Gilda Sedgh, Rubina Hussain. (2010) “Unintended Pregnancy: Worldwide Levels, Trends, and Outcomes.” *Studies in Family Planning*. Vol. 41, No. 4, pp. 241-250.

Nils Daulaire, Pat Leidl, Laurel Mackin, Colleen Murphy, Laura Stark. (2002) “Promises to Keep: The Toll of Unintended Pregnancies on Women’s Lives in the Developing World.” Global Health Council. Washington, DC.

40. UNICEF. (2001). “A League Table of Teenage Births in Rich Nations.” *Innocenti Report Card*. No. 3, Jul. 2001. UNICEF Innocenti Research Centre, Florence.

The National Campaign to Prevent Teen and Unplanned Pregnancy. (2010) “Teen Birth Rates: How Does the United States Compare?” [Link](#)

Source for United States:

Joyce Martin, Brady Hamilton, Paul Sutton, Stephanie Ventura, T.J. Mathews, Michelle Osterman. (2010). “Births: Final Data for 2008.” *National Vital Statistics Reports*. Vol. 59, No. 1, pp. 1-72. Centers for Disease Control. Atlanta, GA.

For other countries:

United Nations Statistical Division. (2011) “Demographic Yearbook 2008.” United Nations. New York, NY.

The US rate had been lowering for several years, but recently saw a reversal.

Kathryn Kost, Stanley Henshaw, Liz Carlin. (2010). “U.S. Teenage Pregnancies, Births and Abortions: National and State Trends and Trends by Race and Ethnicity.” *Guttmacher Institute*. Washington, DC.

41. With a few exceptions. Notably, the victims of rape, although this accounts for a very small percentage.

An estimated 1% of unintended pregnancies are caused by rape. (~32,000 / 3,000,000). This ratio is frequently accused of being misreported. Rape, like unsafe sex, is difficult to study with accuracy, as it relies on self-reporting and is under-reported out of shame and over-reported to gain sympathy and absolve oneself of responsibility.

Melisa Holmes, Heidi Resnick, Dean Kilpatrick, Connie Best. (1996) “Rape-Related Pregnancy: Estimates and Descriptive Characteristics from a National Sample of Women.” *American Journal of Obstetrics and Gynecology*. Vol. 175, No. 2, pp. 320-325.

1% of those seeking abortions say they were forced into sex.

Rachel Jones, Jacqueline Darroch, Stanley Henshaw. (2002) “Contraceptive Use among U.S. Women Having Abortions in 2000–2001.” *Perspectives on Sexual and Reproductive Health*. Vol. 34, No. 6, pp. 294-303.

For a variety of reasons, including the delay between infection and detection, it is difficult to estimate the number of STDs caused by rape.

Melisa Holmes. (1999) “Sexually Transmitted Infections in Female Rape Victims.” *AIDS Patient Care and STDs*. Vol. 13, No. 12, pp. 703-708.

42. William Mosher, Jo Jones. (2010) “Use of Contraception in the United States: 1982-2008.” *Vital and Health Statistics*. Vol. 23, No. 29, pp.1-44.

Linda Piccinino, William Mosher. (1998) “Trends in Contraceptive Use in the United States: 1982-1995.” *Family Planning Perspectives*. Vol. 30, No. 1, pp. 4-10.

Kate Zernike. (2006) “Use of Contraception Drops, Slowing Decline of Abortion Rate.” *The New York Times*. May 5, 2006. [Link](#)

43. “Rates of safe sex peaked in the early 1990s but, soon afterwards, heterosexuals began to realise that their risk of HIV was limited - it is mostly transmitted through sexual contact between men - and gave up using condoms regularly.”

Ruth Pollard. (2006) “Unsafe Sex Drives HIV Infection Rate to 10-Year High.” *The Sydney Morning Herald*. Oct. 12, 2006. [Link](#)

44. Some studies suggest that men who have sex with men engage in riskier behavior because advances in AIDS treatment have led them to fear AIDS less.

Ineke Stolte, Nicole Dukers, Ronald Geskus, Roel Coutinho, John Wit. “Homosexual Men Change to Risky Sex When Perceiving Less Threat of HIV/AIDS Since Availability of Highly Active Antiretroviral Therapy: A Longitudinal Study.” *AIDS*. Vol. 18, No. 2, pp. 303-309.

Troy Suarez, Jeffrey Miller. (2001) “Negotiating Risks in Context: A Perspective on Unprotected Anal Intercourse and Barebacking among Men Who Have Sex with Men—Where Do We Go from Here?” *Archives of Sexual Behavior*. Vol. 30, No. 3, pp. 287-300.

One report from Amsterdam said that 55% of gay men admitted having unprotected anal sex in the last six months.

Staff Reporter. (2011) “In Amsterdam, Gay Men Have More Risky Sex.” *Reuters*. Jan. 27, 2011. [Link](#)

After a period during which homosexuals did not account for the majority of new HIV infections, this ratio has taken a sharp upward turn. This report describes the beginning of this trend:

Richard Wolitski, Ronald Valdiserri, Paul Denning, William Levine. (2001) “Are We Headed for a Resurgence of the HIV Epidemic among Men Who Have Sex with Men?” *American Journal of Public Health*. Vol. 91, No. 6, pp. 883-888.

Some people were told that treatment prevented transmission of the virus, but this was not true.

David Wilson, Matthew Law, Andrew Grulich, David Cooper, John Kaldor. (2008) “Relation Between HIV Viral Load and Infectiousness: A Model-Based Analysis.” *The Lancet*. Vol. 372, No. 9635, pp. 314-320.

45. “At the end of 2008...Most (75.0%) persons living with HIV were male, and 65.7% of the males were men who have sex with men (MSM).”

Lucia Torian, Mi Chen, Philip Rhodes, H. Irene Hall. (2011) “HIV Surveillance --- United States, 1981–2008.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 60, No. 21, pp. 689-693. Centers for Disease Control and Prevention. Atlanta, GA.

Transmission via female-to-female contact is almost unheard of.

Lyle Petersen, Lynda Doll, Carol White, Susan Chu. (1992) “No Evidence for Female-to-Female HIV Transmission among 960,000 Female Blood Donors.” *Journal of Acquired Immune Deficiency Syndromes*. Vol. 5, No. 9, pp. 853-956.

A single case in 2003 was noteworthy enough to publish.

Helena Kwakwa, M. W. Ghobrial. (2003) “Female-to-Female Transmission of Human Immunodeficiency Virus.” *Clinical Infectious Diseases*. Vol. 36, No. 3, pp. e40-e41.

46. An estimated 87.3% acquire HIV exclusively through sex, not counting MSM with IV drug use (in which case the transmission method is unclear).

Centers for Disease Control and Prevention. (2011) “Diagnoses of HIV Infection and AIDS in the United States and Dependent Areas, 2009.” *HIV Surveillance Report*. Vol. 21.

Self-reported condom usage is not reliable.

Jonathan Zenilman, Carol Weisman, Anne Rompalo, Nancy Elish, Dawn Upchurch, Edward Hook III, David Celentano. (1995) “Condom Use to Prevent Incident STDs: The Validity of Self-Reported Condom Use.” *Sexually Transmitted Diseases*. Vol. 22, No. 1, pp. 15-21.

Condoms are much more effective at preventing HIV than infection rates could possibly account for, even if condoms were used most of the time.

King Holmes, Ruth Levine, Marcia Weaver. (2004) “Effectiveness of Condoms in Preventing Sexually Transmitted Infections.” *Bulletin of the World Health Organization*. Vol. 84, No. 6, pp. 454-461.

Owen Devine, Sevgi Aral. (2004) “The Impact of Inaccurate Reporting of Condom Use and Imperfect Diagnosis of Sexually Transmitted Disease Infection in Studies of Condom Effectiveness: A Simulation-Based Assessment.” *Sexually Transmitted Diseases*. Vol. 31, No. 10, pp. 588-595.

S.C. Weller, K. Davis-Beatty. (2002) “Condom Effectiveness in Reducing Heterosexual HIV Transmission.” *Cochrane Database of Systematic Reviews*. No. 1.

Despite an estimated 15,000 acts of intercourse, HIV was not transmitted between any of 124 serodiscordant couples who used condoms consistently for vaginal and anal sex. Among 121 serodiscordant couples who used

condoms inconsistently, 8 people infected their partners over the course of 20 months.

Isabelle De Vincenzi. (1994) “A Longitudinal Study of Human Immunodeficiency Virus Transmission by Heterosexual Partners.” *The New England Journal of Medicine*. Vol. 331, No. 6, pp. 341-346.

This study found that a condom was used in only one out of four acts of vaginal intercourse. Among singles, one out of three.

Debby Herbenick, Michael Reece, Vanessa Schick, Stephanie Sanders, Brian Dodge, J. Dennis Fortenberry. (2010) “Condom Use Rates in a National Probability Sample of Males and Females Ages 14 to 94 in the United States.” *The Journal of Sexual Medicine*. Vol. 7, Supplement 5, pp. 266-276.

Only one-half of sexually active teen males reported using a condom consistently with their most recent partner.

Jennifer Manlove, Erum Ikramullah, Elizabeth Terry-Humen. (2008) “Condom Use and Consistency among Male Adolescents in the United States” *Journal of Adolescent Health*. Vol. 43, No. 4, pp. 325-333.

47. “Slightly more than half of unintended pregnancies occur among women who were not using any method of contraception in the month they conceived, and more than four in 10 occur among women who used their method inconsistently or incorrectly. Only one in 20 are attributable to method failure.”

Jennifer Frost, Jacqueline Darroch, Lisa Remez. (2008) “Improving Contraceptive Use in the United States” In Brief. No. 1. Guttmacher Institute. Washington, DC.

48. The CDC reports HIV transmission in four categories: 53% male-to-male sexual contact, 31% high-risk heterosexual contact, 12% injection drug use, 4% male-to-male sexual contact and injection drug use. (All transmission via male-to-male sexual contact is classified as high-risk.)

Centers for Disease Control and Prevention. (2008) “Estimates of New HIV Infections in the United States” Centers for Disease Control and Prevention. Atlanta, GA.

Sex between men is inherently risky compared to heterosexual sex (and especially sex between women). HIV rates among men who have sex with men is much higher than the rest of the population.

“Gay, bisexual, and other men who have sex with men (MSM) represent approximately 2% of the US population, yet are the population most severely affected by HIV and are the only risk group in which new HIV infections have been increasing steadily since the early 1990s. In 2006, MSM accounted for more than half (53%) of all new HIV infections in the United States, and MSM with a history of injection drug use (MSM-IDU) accounted for an additional 4% of new infections. At the end of 2006, more than half (53%) of all people living with HIV in the United States were MSM or MSM-IDU. Since the beginning of the US epidemic, MSM have consistently

represented the largest percentage of persons diagnosed with AIDS and persons with an AIDS diagnosis who have died...In 2007, MSM were 44 to 86 times as likely to be diagnosed with HIV compared with other men, and 40 to 77 times as likely as women.”

Centers for Disease Control and Prevention. (2010) “HIV among Gay, Bisexual and Other Men Who Have Sex with Men (MSM).” Centers for Disease Control and Prevention. Atlanta, GA.

This risk is increased further when MSM engage in anal sex, as unprotected receptive anal sex is the behavior with the highest risk of HIV transmission.

M.L. Campsmith, E.B. Begley, G.V. Nakamura. (2004) “High-Risk Sexual Behavior by HIV-Positive Men Who Have Sex with Men --- 16 Sites, United States, 2000–2002.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 53, No. 38, pp. 891-894. Centers for Disease Control and Prevention. Atlanta, GA.

In one study, over half of gay male couples were either in open relationships (47%) or in relationships in which one partner thought it was monogamous and the other did not (8%).

Colleen Hoff, Sean Beougher, Deepalika Chakravarty, Lynae Darbes, Torsten Neilands. (2010) “Relationship Characteristics and Motivations behind Agreements among Gay Male Couples: Differences by Agreement Type and Couple Serostatus.” *AIDS Care*. Vol. 22, No. 7, pp. 827-835.

Despite the risks, gay men do not get tested frequently enough. (No group does, for that matter, but it is particularly impactful due to the high infection rate among gay men.)

“A recent CDC study found that in 2008 one in five (19%) MSM in 21 major US cities were infected with HIV, and nearly half (44%) were unaware of their infection.”

Centers for Disease Control and Prevention. (2010) “HIV among Gay, Bisexual and Other Men Who Have Sex with Men (MSM).” Centers for Disease Control and Prevention. Atlanta, GA.

49. The previous youngest winner was Michael Jackson, posthumously awarded at what would have been age 51.
50. According to the Billboard Hot 100 Chart, Elvis Presley and Mariah Carey tie at 79 weeks each at number one.
Fred Bronson. (2008) “Chart Beat.” *Billboard*. Apr. 10, 2008.
51. Ray Waddell. (2011). “Lady Gaga’s Monster Ball Tour Breaks Record for Debut Headlining Artist.” *Billboard*. May 5, 2011. [Link](#)
52. Wikipedia. “List of Highest-Grossing Concert Tours.” Jul. 13, 2011. [Link](#)
53. The youngest self-made female billionaire is Chu Lam Yiu, who passed the billion-dollar-mark at 38 in 2008.

Lurie Burkitt. (2008) “The World’s Youngest Women Billionaires.” *Forbes*. Jul. 24, 2008. [Link](#)

Staff Reporter. (2010) “China’s 7 Self-Made Female Billionaires.” *China Daily*. Mar. 23, 2010. [Link](#)

As of 2010, there were 14 self-made female billionaires worldwide. Three were American: Doris Fisher (78, co-founded Gap), Oprah Winfrey (57, television and publishing mogul), Meg Whitman (54, former eBay CEO).

Luisa Kroll. (2010) “The World’s Richest Self-Made Women.” *Forbes*. Jun. 14, 2010. [Link](#)

54. Note: Other female individuals on the list: Lyda Hill, self-made, female, but not a billionaire; Lynn Schusterman and Shelby White, not self-made.

Giving Pledge, LLC. (2011) “Directory [of Donors].” *GivingPledge.org*. Dec. 31, 2011. [Link](#)

55. No singer has become a billionaire to date. (The following is not the most authoritative source, but the data were confirmed in other sources. This is a complete compiled list that includes total wealth, not just current earnings.)

William Gish. (2010) “10 Richest Singers in the World.” Mar. 13, 2010. *Made Man*. [Link](#)

The only two women in entertainment to become billionaires are Oprah Winfrey and J.K. Rowling. The female singer with the largest fortune was Madonna with \$325 million.

Lea Goldman, Kiri Blakeley. (2007) “The 20 Richest Women in Entertainment.” *Forbes*. Jan. 18, 2007. [Link](#)

56. Cortney Harding. (2009) “Lady Gaga: The Billboard Cover Story.” *Billboard*. Aug. 7, 2009. [Link](#)

57. The Recording Academy. (2010) “Nominees and Winners.” [Link](#)

Chart rankings overview:

Wikipedia. (2011) “Poker Face (Lady Gaga song).” Jul. 10, 2011. [Link](#)

58. “Lady Gaga’s (USA) track ‘Poker Face’ spent a record 83 weeks on the US Hot Digital Songs chart in 2009/2010.”

Guinness World Records. (2010) “Track with Most Weeks on the US Hot Digital Songs Chart.” [Link](#)

59. Gil Kaufman. (2010) “Lady Gaga Lands in ‘Guinness World Records’ Book.” *MTV*. Sep. 16, 2010. [Link](#)

60. Samuel Axon. (2010) “Lady Gaga First Artist with One Billion Online Video Views.” *Mashable*. Mar. 24, 2010. [Link](#)

61. Liz Heron. (2010) “50 Most Popular Women on the Web, Per Google Search Results.” *ABC News*. May 6, 2010. [Link](#)

62. Guinness World Records. (2011) “Most followers on Twitter.” Jun. 29, 2011. [Link](#)
 63. The most liked person at the time was Michael Jackson (posthumously).
Daniel Macht. (2010) “Lady Gaga Most Popular Living Person on Facebook.” NBC New York. Jul 2, 2010. [Link](#)
Staff Reporter. (2011) “Eminem Tops Lady Gaga in Facebook ‘Likes’.” MSNBC. Feb. 24, 2011. [Link](#)
 64. Nekesa Mumbi Moody. (2011) “Lady Gaga Blitzes Market with Landmark Campaign for ‘Born This Way.’” Associated Press/MSNBC. May 25, 2011. [Link](#)
Steve Jones. (2011) “Lady Gaga’s ‘Born This Way’ Delivers Huge Sales.” USA Today. Jun. 1, 2011. [Link](#)
 65. FarmVille was the most popular game on Facebook between August 2009 and December 2010.
Appdata. (2011) Custom report generated at: [Link](#)
Adam Hadhazy. (2011) “CityVille Surpasses FarmVille as Most Popular Game on Facebook.” TechNewsDaily via MSNBC. Mar. 14, 2011. [Link](#)
 66. Todd Wasserman. (2011) “Lady Gaga & Zynga Found ‘GagaVille’” CNN Tech via Mashable. May 11, 2011. [Link](#)
 67. Tim Nudd. (2011) “Google Mashes Up Fan Videos for Lady Gaga Spot.” Adweek. May 23, 2011. [Link](#)
 68. Steven Duchon. (2011) “Video: Lady Gaga Stars in Spectacle Performing ‘Born This Way’ on Saturday Night Live.” The Grand Rapids Press. May 22, 2011.
 69. Lance Whitney. (2011) “Amazon Helps Lady Gaga Top 1 Million in Sales.” CNET. Jun. 1, 2011. [Link](#)
 70. Marc Saltzman. (2011) “Born This Way Revenge: Play Through Lady Gaga’s Hits.” USA Today. Jun. 5, 2011. [Link](#)
 71. Staff Reporter. (2011) “Starbucks Targets Younger Demo with Lady Gaga Scavenger Hunt.” Mobile Marketer. May 23, 2011. [Link](#)
 72. Vaughn Schoonmaker. (2011) “Lady Gaga Greets Fans at Born This Way Promo.” MTV News. May 24, 2011. [Link](#)
Matthew Perpetua. (2011) “Amazon, Best Buy Sell Lady Gaga’s Album at Deep Discount.” Rolling Stone. May 23, 2011. [Link](#)
 73. Gary Trust. (2011) “Lady Gaga Claims 1,000th Hot 100 No. 1 with ‘Born This Way’” Billboard. Feb. 16, 2011. [Link](#)
- Also: Nineteenth song to debut at number one and the largest opening week digital sales from a female artist (third overall).

74. Guinness World Records. (2011) “Fastest-Selling Single on iTunes.” Feb. 16, 2011. [Link](#)
75. Gil Kaufman. (2011) “Lady Gaga’s ‘Born This Way’ Is Fastest-Selling Single in iTunes History.” MTV News. Feb. 18, 2011. [Link](#)
76. Ben Sisario. (2011) “In Lady Gaga’s Album, Evidence of a New Order.” The New York Times. Jun. 1, 2011. [Link](#)
77. Kit Eaton. (2011) “As Buying and Storing Tunes Becomes Easier, Digital Album Sales Drive Music-Industry Growth” Fast Company. Jul. 7, 2011. [Link](#)
78. DoSomething.org. (2011) “Top 20 Celebs Gone Good for 2011.” Dec. 22, 2011. [Link](#)
- Terri Schwartz. (2011) “Lady Gaga, Justin Bieber Top ‘Celebs Gone Good.’” MTV. Dec. 27, 2011. [Link](#)
79. Emily Bazelon. (2012) “Lady Gaga, Anti-Bullying Crusader.” Slate. Mar. 1, 2012. [Link](#)
80. Gaga had stated she tested “borderline positive” for lupus and that it runs in her family.
- Sheila Marikar. (2010) “Lady Gaga Admits Testing ‘Borderline Positive’ for Lupus.” ABC News. Jun. 2, 2010. [Link](#)
- A celebrity reporter claimed that her lupus was far more serious than she let on.
- Nadia Mendoza. (2011) “‘Gaga Is Sick and Obsessed with Her Weight,’ Explosive New Book Accuses Singer of Drug Abuse and Starving Herself.” Daily Mail. Jul. 7, 2011. [Link](#)
81. Author’s Note: Originally set at Hazard Park, in the shadow of the LA County Hospital, but changed after concerns that performing near the hospital could interfere with emergency services.
82. M.S. Gottlieb, H.M. Schanker, P.T. Fan, A. Saxon, J.D. Weisman, I. Pozalski. (1981) “Pneumocystis Pneumonia- Los Angeles.” Morbidity and Mortality Weekly Report (MMWR). Vol. 30, No. 21, pp. 250-252. Centers for Disease Control and Prevention. Atlanta, GA.
- Maryn McKenna. (2004) “Beating Back the Devil.” Free Press. New York, NY. pp. 99-112.
83. There has been almost no change in the annual number of new HIV cases since 1991.
- H. Irene Hall, Ruiguang Song, Philip Rhodes, Joseph Prejean, Qian An, Lisa Lee, John Karon, Ron Brookmeyer, Edward Kaplan, Matthew McKenna, Robert Janssen. (2008) “Estimation of HIV Incidence in the United States.” Journal of the American Medical Association. Vol. 300, No. 5, pp. 520-529.
84. The percentage of Americans who rank HIV as a major health problem has declined steeply over the past decade.

Kaiser Family Foundation. “2009 Survey of Americans on HIV/AIDS: Summary of Findings on the Domestic Epidemic.” Apr. 2009.

85. Stuart Silverstein, Charles Ornstein. (2002) “Record Donation to UCLA.” Los Angeles Times. May 7, 2002. [Link](#)
86. Based on the CDC’s guidelines:
Centers for Disease Control and Prevention. (2011) “HIV Testing Basics for Consumers.” Centers for Disease Control and Prevention. Atlanta, GA. [Link](#)
87. Alice Gomstyn, Jim Dubreuil. (2012) “Madonna Breaks Silence on Gaga ‘Born This Way’ Controversy; ‘20/20’ Exclusive Tonight.” ABC News. Jan. 13, 2012. [Link](#)
Author’s Note: Such cooperation may be overly optimistic considering the extreme nature of some recent comments.
88. Staff Reporter. (2012) “Beastie Boys Co-Founder Adam Yauch Dead at 47.” Rolling Stone. May 4, 2012. [Link](#)
89. Based on a prediction by:
Sonal Gandhi. (2010) “US Music Forecast, 2009 To 2014.” Forrester Research. Jan. 13, 2010. [Link](#)
90. City of New York. (2011) “Mayor Bloomberg, UN Secretary-General Ban Ki-Moon and Transportation Commissioner Sadik-Khan Announce New Traffic Safety Initiatives” Press Release PR-151-11. May 12, 2011. [Link](#)
91. Nekesa Mumbi Moody. (2011) “Lady Gaga Blitzes Market with Landmark Campaign for ‘Born This Way.’” Associated Press/MSNBC. May 25, 2011. [Link](#)
92. Brian Anthony Hernandez. (2011) “How Lady Gaga Created a Web Marketing Spectacle for Born This Way.” Mashable. May 24, 2011. [Link](#)
93. A case study that shows just how large a response an online creative contest can generate is Google’s 10¹⁰⁰ Project, which brought in an overwhelming 150,000 entries. [Link](#)
94. For reference, The Monster Ball Tour had 201 shows in 28 countries.
95. This was based on Justin Timberlake’s public respect for Gaga.
“Okay, let’s talk about Lady Gaga for a minute. She’s a force. Beyond awesome. I mean, she’s legitimately talented...If I were Lady Gaga, I’d do whatever I wanted, which it looks like she’s doing. She’s just plain old good.”
David Hochman. (2011) “Playboy Interview: Justin Timberlake.” Playboy. Jun. 13, 2011. [Link](#)
96. Timberlake’s actual return to music came with his January 2013 release of the single “Suit & Tie.”
97. Staff Reporter. (2009) “The 100 Best Singles of 2008.” Rolling Stone. Dec. 25, 2008.

98. It was at the top of the charts for four weeks total, but technically Gaga’s song interrupted a run of three consecutive weeks, as the week after “Single Ladies” first hit number one, it was interrupted for a week by “Live Your Life” by T.I. feat. Rihanna.
- “Single Ladies” was number one on the Hot 100 for the week of Jan. 10, 2009, followed by “Just Dance” the week of Jan. 17, 2009.
- Billboard. (2011) “Hot 100.” Jan. 10, 2009. [Link](#)
- Billboard. (2011) “Hot 100.” Jan. 17, 2009. [Link](#)
99. #2: “In This Skin” (2004), #4: “Do You Know” (2008), #5: “A Public Affair” (2006), #6: “Irresistible” (2001).
- Billboard. (2011) “Jessica Simpson: Chart History, Billboard 200.” [Link](#)
100. Staff Reporter. (2011) “Big Hair from Billion-Dollar Woman Jessica Simpson as She Reveals How She Climbed to the Top of Fashion World.” Daily Mail. Feb. 16, 2011. [Link](#)
101. Simpson said: “Of all the things about myself, staying a virgin until my wedding night is the thing that makes me most proud.”
- Staff Reporter. (2004) “Not Such a Dumb Blonde?” The Sunday Times. Jun. 27, 2004. [Link](#)
102. Jessica Simpson’s last entry on Billboard’s Radio Songs Chart was “Take My Breath Away” in 2006.
- Billboard. (2011) “Jessica Simpson: Chart History, Radio Songs.” [Link](#)
- “My show is the only reason right now why I have sales on my album,’ she admits. ‘I don’t even have a song on the radio.”
- Jennifer Vineyard. (2003) “Jessica Simpson – The Innocent.” MTV News. Nov. 21, 2003. [Link](#)
103. Miguel de Cervantes Saavedra (Author), Edith Grossman (Translator). (2003) “Don Quixote.” HarperCollins. New York, NY. p. 486.
104. 12.6% of people in the US in are black/African American.
- US Census Bureau. (2011) “Overview of Race and Hispanic Origin: 2010.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.
- 56% of people who died in 2007 from AIDS were black/African American.
- Jiaquan Xu, Kenneth Kochanek, Sherry Murphy, Betzaida Tejada-Vera. (2010) “Deaths: Final Data for 2007.” National Vital Statistics Reports. Vol. 58, No. 19, pp. 1-136.
- Paul Denning, Elizabeth DiNenno. (2010) “Communities in Crisis: Is There a Generalized HIV Epidemic in Impoverished Urban Areas of the United States?” Centers for Disease Control and Prevention. Atlanta, GA.
- AIDS diagnoses data from:

Centers for Disease Control and Prevention. (2007) “Cases of HIV infection and AIDS in the United States and Dependent Areas, 2005.” HIV/AIDS Surveillance Report. Vol. 17, Revised Edition. Centers for Disease Control and Prevention. Atlanta, GA.

105. “Data from several studies overwhelmingly supported the assertion that Black MSM are less likely than White MSM to identify as gay.”
Gregorio Millett, John Peterson, Richard Wolitski, Ron Stall. (2006) “Greater Risk for HIV Infection of Black Men Who Have Sex with Men: A Critical Literature Review.” American Journal of Public Health. Vol. 96, No. 6, pp. 1007-1019.
106. Centers for Disease Control and Prevention. (2010) “HIV and AIDS among Gay and Bisexual Men.” Centers for Disease Control and Prevention. Atlanta, GA.
107. Benoit Denizet-Lewis. (2003) “Double Lives on the Down Low.” The New York Times Magazine. Aug. 3, 2003. [Link](#)
108. This theory is almost impossible to study, let alone prove, due to people not identifying as gay or bisexual and/or lying about sexual activity.
David Malebranche. (2008) “Bisexually Active Black Men in the United States and HIV: Acknowledging More than the ‘Down Low.’” Archives of Sexual Behavior. Vol. 37, No. 5, pp. 810-816.
For a review of 12 theories about why the HIV rates for black MSM are so high, read:
Gregorio Millett, John Peterson, Richard Wolitski, Ron Stall. (2006) “Greater Risk for HIV Infection of Black Men Who Have Sex with Men: A Critical Literature Review.” American Journal of Public Health. Vol. 96, No. 6, pp. 1007-1019.
In it, the described behavior is confirmed, but not linked to the higher rates of HIV. However, it was still a widely held belief among the public after it made headlines in popular media. Emerging theories explain the phenomenon as being related to the emphasis on masculinity in black culture, as well as the misguided perception that the more masculine a man is, the less likely he is to have HIV; these theories are still being explored for validity.
109. Staff Reporter. (2005) “Kanye West Calls for End to Gay Bashing.” USA Today. Aug. 18, 2005. [Link](#)
110. Staff Reporter. (2005) “Star Says Rap is ‘Too Homophobic.’” BBC News. Aug. 19, 2005. [Link](#)
111. Caveat: At the end, Eminem’s character convinces Dr. Dre’s to give in, telling the man to kill his cheating wife and her lover.
112. James Montgomery. (2009) “Eminem Is the Best-Selling Artist of the Decade.” MTV. Dec. 8, 2009. [Link](#)
113. Among other things, Eminem credits Elton John for his sobriety.

Vanessa Thorpe. (2010) “Elton John Tells How He Helped Eminem Quit Drugs.” *The Observer*. Jan. 3, 2010. [Link](#)

Eric Ditzian. (2011) “Eminem Talks about His Friendship with Elton John.” *MTV*. Jan. 4, 2010. [Link](#)

114. Major stars, Elton John in particular, have been constantly defending Eminem for over a decade.

Eric Schumacher-Rasmussen. (2001) “Madonna, Elton, Stevie Wonder Defend Eminem.” *MTV*. Feb. 21, 2001. [Link](#)

Roman Wolfe. (2011) “Sir Elton John Defends Rap Music; Blasts the United States.” *AllHipHop*. Jan. 26, 2011. [Link](#)

Lynn Barker. (2011) “Elton John on Rappers and Garden Gnomes.” *TeenMusic*. Jan. 25, 2011. [Link](#)

115. In “A Kiss,” a song from “Hell: The Sequel,” a collaborative album with Royce da 5’9”, Eminem raps: “Tell Lady Gaga she can quit her job at the post office / She’s still a male lady ... Wouldn’t f-ck her with her d-ck / You heard it / The verdict’s in.”

A few days after the track was leaked, in an interview with Allison Hagedorf, Eminem played it off as a joke and said: “Lady Gaga, as an artist...she’s undeniable...she’s dope, she’s an incredible talent.”

Fuse Networks. (2011) “Bad Meets Evil: Lady Gaga – Bonnaroo 2011.” *Fuse.tv*. Jun. 11, 2011. [Link](#)

116. David Auerbach, William Darrow, Harold Jaffe, James Curran. (1984) “Cluster of Cases of the Acquired Immune Deficiency Syndrome: Patients Linked by Sexual Contact.” *The American Journal of Medicine*. Vol. 76, No. 3, pp. 487-492.

It was later found that the virus moved from Africa to America earlier, most likely via Haiti (however, research suggests Dugas was one of a handful of men who played a key role in the sudden rapidity of the disease’s spread in the US).

Thomas Gilbert, Andrew Rambaut, Gabriela Wlasiuk, Thomas Spira, Arthur Pitchenik, Michael Worobey. (2007) “The Emergence of HIV/AIDS in the Americas and Beyond.” *Proceedings of the National Academy of Sciences*. Vol. 104, No. 47. pp. 18566-18570.

Carla Kuiken, Rama Thakallapalli, Anne Eskild, Anthony de Ronde. (2000) “Genetic Analysis Reveals Epidemiologic Patterns in the Spread of Human Immunodeficiency Virus.” *American Journal of Epidemiology*. Vol. 152, No. 9, pp. 814-822.

117. Feifei Sun. (2011) “Lady Gaga Designs Wristband for Japan Earthquake Relief.” *Time*. Mar. 13, 2011. [Link](#)

118. Benji Wilson. (2010) “Lady Gaga Gets Lippy: The Pop Star Teams with Mac to Raise Aids Awareness.” *Daily Mail*. Apr. 10, 2010. [Link](#)

119. Harvey Frommer. (2007) “Five o’Clock Lightning: Babe Ruth, Lou Gehrig, and the Greatest Baseball Team in History, the 1927 New York Yankees.” John Wiley & Sons. Hoboken, NJ.
120. Wilt Chamberlain claimed to have slept with 20,000 women.
Wilt Chamberlain. (1992) “A View from Above.” Signet. New York, NY.
121. “...Johnson admitted he had been sleeping with three hundred to five hundred people a year.”
Roland Lazenby. (2010) “Jerry West: The Life and Legend of a Basketball Icon.” ESPN Books. New York, NY. p. 376.
122. Lisa DePaulo, Kyla Jones. (2006) “The Days and Nights of an NBA Groupie.” GQ. Jul. 2006. [Link](#)
123. Journal of Blacks in Higher Education. (2006) “The False Promise of Basketball as the Best Route out of Inner-City Poverty for Young Blacks.” No. 47. Spring 2006.
124. 53% of American high school juniors have had sex.
Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” Morbidity and Mortality Weekly Report (MMWR). Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.
125. Suzanne Ryan, Jennifer Manlove, Kerry Franzetta. (2003) “The First Time: Characteristics of Teens’ First Sexual Relationships.” Research Brief. Vol. 16, No. 1, pp. 1-8. Child Trends. Washington, DC.
126. Average age of first intercourse for both sexes is 17.
Anjani Chandra, Gladys Martinez, William Mosher, Joyce Abma, Jo Jones. (2005) “Fertility, Family Planning, and Reproductive Health of U.S. Women: Data from the 2002 National Survey of Family Growth.” Vital and Health Statistics. Vol. 23, No. 25, pp. 1-180.
Gladys Martinez, Anjani Chandra, Joyce Abma, Jo Jones, William Mosher. (2006) “Fertility, Contraception, and Fatherhood: Data on Men and Women from Cycle 6 (2002) of the 2002 National Survey of Family Growth.” Vital and Health Statistics. Vol. 23, No. 26, pp. 1-142.
- These figures agree with the CDC’s findings, which organized results by grade level, rather than specific age.
Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” Morbidity and Mortality Weekly Report (MMWR). Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.

127. Chris Chapman, Jennifer Laird, Angelina KewalRamani. (2010) “Trends in High School Dropout and Completion Rates in the United States: 1972–2008.” US Department of Education, National Center for Education Statistics. Washington, DC.
128. This was true not only in practice, but also in perception. In 2010, 78% of those 15-19 years old agreed with the statement, “Most high school-age teens have had sex.”
Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
129. Changing the norm for high school behavior, even a small amount, would have a profound impact, as it is central to what motivates behavior, particularly during adolescence.
Douglas Kirby. (2001) “Understanding What Works and What Doesn’t in Reducing Adolescent Sexual Risk-Taking.” Family Planning Perspectives. Vol. 33, No. 6, pp. 276-281.
130. Research concludes that men typically over-report and women typically under-report the total number of opposite-sex partners because they choose different strategies for counting sexual partners (guided by differing social attitudes toward men and women with many partners). When using the same strategy, both sexes report similar numbers.
Norman Brown, Robert Sinclair. (1999) “Estimating Number of Lifetime Sexual Partners: Men and Women Do It Differently.” The Journal of Sex Research. Vol. 36, No. 3, pp. 292-297.
Michael Wiederman. (1997) “The Truth Must Be in Here Somewhere: Examining the Gender Discrepancy in Self-Reported Lifetime Number of Sex Partners.” The Journal of Sex Research. Vol. 34, No. 4, pp. 375-386.
131. Centers for Disease Control and Prevention. (2009) “2009 Sexually Transmitted Diseases Surveillance: Syphilis.” Centers for Disease Control and Prevention. Atlanta, GA.
132. Prior to the more recent low levels of syphilis, scientists in the 1950s and 1960s thought it could be eradicated then as well.
Staff Reporter. “Medicine: Resurgent Syphilis: It Can Be Eradicated.” Time. Sep. 21, 1962. [Link](#)
133. FourSquare already introduced an STD testing badge.
Tyler Gray. (2011) “Foursquare on What the Hell It Was Thinking with an STD Test Badge.” Wired. May 12, 2011. [Link](#)
134. Centers for Disease Control and Prevention. (2011) “HIV Testing Basics for Consumers.” Centers for Disease Control and Prevention. Atlanta, GA. [Link](#)
135. “...an RNA test with 50 copies/ml sensitivity would detect HIV infection approximately 7 days before a p24 antigen test, and 12 days before a sensitive anti-HIV test.”

Eberhard Fiebig, David Wright, Bhupat Rawal, Patricia Garrett, Richard Schumacher, Lorraine Peddada, Charles Heldebrant, Richard Smith, Andrew Conrad, Steven Kleinman, Michael Busch. (2003) “Dynamics of HIV Viremia and Antibody Seroconversion in Plasma Donors: Implications for Diagnosis and Staging of Primary HIV Infection.” *AIDS*. Vol. 17, No. 13, pp. 1871-1879.

136. Susan Stramer, Simone Glynn, Steven Kleinman, Michael Strong, Sally Caglioti, David Wright, Roger Dodd, Michael Busch. (2004) “Detection of HIV-1 and HCV Infections among Antibody-Negative Blood Donors by Nucleic Acid–Amplification Testing.” *New England Journal of Medicine*. Vol. 351, No. 8, pp. 760-768.

137. In 2011, three sample testing services had costs between \$175 and \$249 for nucleic acid HIV tests.

\$199: STD Test Express. (2011) “Test Center Locations & Pricing.” [Link](#)

\$175: STDAAlert.com. (2011) “Test Packages & Prices.” [Link](#)

\$249: tSTD Services Group Inc. (2011) “Order Your Testing.” [Link](#)

138. In fact, the amount of dating activity was the most predictive behavioral factor, and the second-highest predictive factor overall.

Suzanne Ryan, Kerry Franzetta, Jennifer Manlove, Emily Holcombe. (2007) “Adolescents’ Discussions about Contraception or STDs with Partners before First Sex.” *Perspectives on Sexual and Reproductive Health*. Vol. 39, No. 3, pp. 149-157.

Description of dating activities:

Suzanne Ryan, Kerry Franzetta, Jennifer Manlove. (2003) “Characteristics of Teens’ First Sexual Partner.” *Science Says*. No. 5. Child Trends/The National Campaign to Prevent Teen Pregnancy. Washington, DC.

139. Jennifer Manlove, Suzanne Ryan, Kerry Franzetta. (2004) “Contraceptive Use and Consistency in U.S. Teenagers’ Most Recent Sexual Relationships.” *Perspectives on Sexual and Reproductive Health*. Vol. 36, No. 6, pp. 265-275.
140. Jennifer Manlove, Suzanne Ryan, Kerry Franzetta. (2003) “Patterns of Contraceptive Use within Teenagers’ First Sexual Relationships.” *Perspectives on Sexual and Reproductive Health*. Vol. 35, No. 6, pp. 246-255.
141. Susan Harlap, Kathryn Kost, Jacqueline Darroch Forrest. (1991) “Preventing Pregnancy, Protecting Health: A New Look at Birth Control Choices in the United States.” *Guttman Institute*. New York, NY.
142. The percentage of sexually active students who used a condom during last sexual intercourse increased between 1991 and 2003 (46.2%–63.0%). It then fell slightly between 2003 and 2009 (63.0%–61.1%).

Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” *Morbidity and*

Mortality Weekly Report (MMWR). Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.

143. “Teens in the United States and European teens have similar levels of sexual activity. However, the latter are more likely to use contraceptives and to use effective contraceptive methods; they therefore have substantially lower pregnancy rates.”
- John Santelli, Theo Sandfort, Mark Orr. (2008) “Transnational Comparisons of Adolescent Contraceptive Use: What Can We Learn from These Comparisons?” Archives of Pediatric Adolescent Medicine. Vol. 162, No. 1, pp. 92-94.
144. Sarah Brown, Leon Eisenberg. (1995) “The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families.” National Academy Press. Washington, DC.
145. It would logically follow that the abortion rate would drop much further than the total pregnancy rate, as the latter includes both intended and unintended pregnancies, but the effects of the Three Month Rule would only affect unintended pregnancies.
146. John Donohue, Steven Levitt. (2001) “The Impact of Legalized Abortion on Crime.” Quarterly Journal of Economics. Vol. 116, No. 2, pp. 379-420.
147. Steven Levitt, Stephen Dubner. (2005) “Freakonomics: A Rogue Economist Explores the Hidden Side of Everything.” HarperCollins. New York, NY.
148. Hans Forssman, Inga Thuwe. (1966) “One Hundred and Twenty Children Born after Application for Therapeutic Abortion Refused.” Acta Psychiatrica Scandinavica. Vol. 41, No. 1, pp. 71-78.
149. Caveat: Some prominent conservatives do agree with the premise of the idea, even if they oppose abortion. Ann Coulter, for example, has said “the leading cause of all social pathologies is single motherhood” and “various studies have shown that children raised by a single mother comprise about 70 percent of juvenile murderers, delinquents, teenaged mothers, drug abusers, dropouts, suicides and runaways.” (She strongly advocates adoption.)
- Ann Coulter. (2011) “Casey Anthony: Single Mother of the Year!” AnnCoulter.com. Jul. 6, 2011. [Link](#)
150. John Lott. (2007) “Freedomomics: Why the Free Market Works and Other Half-Baked Theories Don’t.” Regnery Publishing. Washington, DC.
151. Shankar Vedantam. (2007) “Research Links Lead Exposure, Criminal Activity.” The Washington Post. Jul. 8, 2007. [Link](#)
152. Lawrence Finer, Stanley Henshaw. (2006) “Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001.” Vol. 38, No. 2, pp. 90-96.
- Rachel Jones, Kathryn Kooistra. (2008) “Abortion Incidence and Access to Services in the United States, 2008.” Perspectives on Sexual and Reproductive Health. Vol. 43, No. 1, pp. 41-50.

153. Calculation based on roughly 44% of unintended pregnancies resulting in birth.

Lawrence Finer, Stanley Henshaw. (2006) “Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001.” Vol. 38, No. 2, pp. 90-96.

It is also based on a conservative estimate of 80% of intended pregnancies resulting in a birth, with a fetal loss rate inflated from the national average due to an unknown number of abortions preempting miscarriages that would have happened, as well as the small number of intended pregnancies that end in abortion.

Stephanie Ventura, William Mosher, Sally Curtin, Joyce Abma, Stanley Henshaw. (1999) “Highlights of Trends in Pregnancies and Pregnancy Rates by Outcome: Estimates for the United States, 1976–96.” National Vital Statistics Reports. Vol. 47, No. 29, pp. 1-10.

Based on these rates, every ten unintended pregnancies avoided would result in 4.4 fewer children, while every eight additional intended pregnancies would result in 6.4 more children, a net positive of two children despite a 20% lower overall pregnancy rate.

154. Lawrence Finer, Stanley Henshaw. (2006) “Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001.” Vol. 38, No. 2, pp. 90-96.
155. Susheela Singh, Gilda Sedgh, Rubina Hussain. (2010) “Unintended Pregnancy: Worldwide Levels, Trends, and Outcomes.” Studies in Family Planning. Vol. 41, No. 4, pp. 241-250.
156. Haya El Nasser, Paul Overberg. (2011) “U.S. Population Growth Slowed, Still Envied.” USA Today. Jan. 6, 2011. [Link](#)
157. Bernard Guyer, Mary Anne Freedman, Donna Strobino, Edward Sondik. (2000) “Annual Summary of Vital Statistics: Trends in the Health of Americans during the 20th Century.” Pediatrics. Vol. 106, No. 6, pp. 1307-1317.
158. Haya El Nasser, Paul Overberg. (2011) “U.S. Population Growth Slowed, Still Envied.” USA Today. Jan. 6, 2011. [Link](#)
159. Rob Stein. (2007) “U.S. Fertility Rate Hits 35-Year High, Stabilizing Population.” The Washington Post. Dec. 21, 2007. [Link](#)
160. “The broad-based decline in births and fertility rates from 2007 through 2009 is now well-documented.”
- Paul Sutton, Brady Hamilton. (2011) “Recent Trends in Births and Fertility Rates through 2010.” Centers for Disease Control and Prevention. Atlanta, GA. [Link](#)
161. The pregnancy rate for married women in 1995 was 113 per 1,000, 18 percent higher than for unmarried women at 96 per 1,000. The birth rate for married women was 84 per 1,000; their abortion rate was 9 per 1,000 in 1995.

Stephanie Ventura, William Mosher, Sally Curtin, Joyce Abma, Stanley Henshaw. (1999) "Highlights of Trends in Pregnancies and Pregnancy Rates by Outcome: Estimates for the United States, 1976–96." National Vital Statistics Reports. Vol. 47, No. 29, pp. 1-10.

162. For the first time in the history of the Census, in 2010 married couples no longer made up the majority of U.S. households. Between 2000 and 2010, married couple households dropped from 52% to 48%. By comparison, in 1950, three-quarters of households were headed by married couples. The number of married adults dropped from 57.3% to 54.1%.

Traditional nuclear families with children are also becoming less common. The number of households headed by a married couple with children under 18 dropped from 24 to 21 percent from 2000 to 2010, and 2010 was the first time over a third of children under 18 were living with a single parent.

Overall household size shrank, except notably among the less educated. The average size of households headed by those who did not graduate high school increased from 2.67 to 2.87 to between 2001 and 2010.

Cohabiting couples grew by 13% in a single year, up to 7.5 million in 2010. In the 1960s, the median age at first marriage for men and women was 23 and 20, respectively. In 2010: 28 and 26.

U.S. Census Bureau. (2011) "America's Families and Living Arrangements: 2010." Housing and Household Economic Statistics Division, Fertility & Family Statistics Branch. Washington, DC.

Attitudes have changed as well. 39% say marriage is becoming obsolete, and 80% say an unmarried couple living together with a child is a family.

Pew Research Center. (2010) "The Decline of Marriage and Rise of New Families." Pew Research Center. Washington, DC.

163. More cynical behavioral economists would attribute the increase in marriage to market friction and irrational escalation (a.k.a. "in for a penny, in for a pound").
164. Bill Albert. (2010) "With One Voice 2010: America's Adults and Teens Sound Off about Teen Pregnancy." The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
165. Despite so many regretting sex now, these lower rates are possible. Dutch teens have long since been initiating sex at the same age as Americans, but they experience far lower regret (along with lower pregnancy and STDs.)

T. Vogels, R. van der Vliet. (1990) "Jeugd en Seks. Gedrag en Gezondheidsrisico's bij Scholieren." SDU Publishers. Den Haag, Netherlands.

A more recent article claims only 5 percent of boys and 12 percent of girls in the Netherlands regret their first time having sex.

Rachael Phelps. (2010) "Dream Team: The European Approach to Teens, Sex, and Love, in Pictures." Slate. Oct. 28, 2010. [Link](#)

166. Those who waited until they were older to have sex report more pleasure and less regret, guilt, and anxiety.
- Jennifer Walsh, L. Monique Ward, Allison Caruthers, Ann Merriwether. (2011) "Awkward or Amazing: Gender and Age Trends in First Intercourse Experiences." *Psychology of Women Quarterly*. Vol. 35, No. 1, pp. 59-71.
- Daniel Wight, Alison Parkes, Vicki Strange, Elizabeth Allen, Chris Bonell, Marion Henderson. (2008). "The Quality of Young People's Heterosexual Relationships: A Longitudinal Analysis of Characteristics Shaping Subjective Experience." *Perspectives on Sexual and Reproductive Health*. Vol. 40, No. 4, pp. 226-237.
- Susan Sprecher, Anita Barbee, Pepper Schwartz. (1995). "'Was It Good for You Too?' Gender Differences in First Sexual Intercourse Experiences." *Journal of Sex Research*. Vol. 32, No. 1, pp. 3-15.
167. People who wait longer are more likely to use contraceptives the first time they have sex.
- Jennifer Manlove, Suzanne Ryan, Kerry Franzetta. (2003) "Patterns of Contraceptive Use within Teenagers' First Sexual Relationships." *Perspectives on Sexual and Reproductive Health*. Vol. 35, No. 6, pp. 246-255.
168. Long-term, monogamous relationships are reported to be more satisfying, both physically and emotionally.
- Edward Laumann, John Gagnon, Robert Michael, Stuart Michaels. (1994) "The Social Organization of Sexuality: Sexual Practices in the United States." University of Chicago Press. Chicago, IL.
169. Kaye Wellings, Martine Collumbien, Emma Slaymaker, Susheela Singh, Zoé Hodges, Dhaval Patel, Nathalie Bajos. (2006) "Sexual Behaviour in Context: A Global Perspective." *The Lancet*. Vol. 368, No. 9548, pp. 1706-1728.
170. Linda Waite, Kara Joyner. (2001) "Emotional Satisfaction and Physical Pleasure in Sexual Unions: Time Horizon, Sexual Behavior, and Sexual Exclusivity." *Journal of Marriage and Family*. Vol. 63, No. 1, 247-264.
- Christopher Scott, Susan Sprecher. (2000) "Sexuality in Marriage, Dating, and Other Relationships: A Decade Review." *Journal of Marriage and Family*. Vol. 62, No. 4, pp. 999-1017.
- Edward Laumann, Anthony Paik, Raymond Rosen. (1999) "Sexual Dysfunction in the United States: Prevalence and Predictors." *The Journal of the American Medical Association*. Vol. 281, No. 6, pp. 537-544.
171. David Myers. (2000) "The Funds, Friends, and Faith of Happy People." *American Psychologist*. Vol. 55, No. 1, pp. 56-67.
172. Alois Stutzer, Bruno Frey. (2006) "Does Marriage Make People Happy, or Do Happy People Get Married?" *Journal of Socio-Economics*. Vol. 35, No. 2, pp. 326-347.
173. One of the most comprehensive meta-analyses available, this source presents 7,837 correlational findings from 603 studies in 69 nations between 1911 and

1994, and is available in a manipulable database format. Sexual satisfaction is a consistently high predictor of happiness. Interestingly, an internal locus of control is also one of the more consistent correlates of happiness – something that waiting exercises.

Ruut Veenhoven. (1994). “World Database of Happiness: Correlates of Happiness.” Erasmus University Rotterdam. Rotterdam, Netherlands.

174. Christopher Swanson. (2010) “U.S. Graduation Rate Continues Decline.” Education Week. Jun, 10, 2010. [Link](#)
175. Robert Cairns, Beverley Cairns, Holly Neckerman. (1989) “Early School Dropout: Configurations and Determinants” Child Development. Vol. 60, No. 6, pp. 1437-1452.
176. Clive Belfield, Henry Levin. (2007) “The Price We Pay: Economic and Social Consequences of Inadequate Education.” Brookings Institution. Washington, DC.

Thirty-five years earlier, one of the authors also wrote one of the most oft-cited reports in this field.

Henry Levin. (1972). “The Costs to the Nation of Inadequate Education.” Findings presented to U.S. Senate, Select Committee on Equal Educational Opportunity. Government Printing Office. Washington, DC.

177. There are many other researchers who support this idea; however, this paper addresses many of the problems with other research, namely controlling for variables to reveal the actual effect of abstinence.

Robert Rector, Kirk Johnson. (2005) “Teenage Sexual Abstinence and Academic Achievement.” Paper presented at the Abstinence Clearinghouse Conference, Aug. 2005. The Heritage Foundation. Washington, DC.

178. Jennifer Cheeseman Day, Eric Newburger. (2002) “The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings.” Current Population Reports. US Census Bureau. Washington, DC.
179. These relationships are extremely well documented. One recent (albeit overtly biased toward marriage) book that examines much of this research is:

Linda Waite, Maggie Gallagher. (2000) “The Case for Marriage: Why Married People Are Happier, Healthier, and Better Off Financially.” Doubleday. New York, NY.

Researchers have also found people in long-term, committed relationships to have interpersonal dynamics virtually identical to married couples and similar advantages over unattached people, particularly sexual satisfaction. The key elements appear to be the length and stability of relationships.

Laura Stafford, Susan Kline, Caroline Rankin. (2004) “Married Individuals, Cohabitors, and Cohabitors Who Marry: A Longitudinal Study of Relational and Individual Well-Being.” Journal of Social and Personal Relationships. Vol. 21, No. 2, pp. 231-248.

Willy Pedersen, Morten Blekesaune. (2003) “Sexual Satisfaction in Young Adulthood: Cohabitation, Committed Dating or Unattached Life?” *Acta Sociologica*. Vol. 46, No. 3, pp. 179-193.

180. John Todd. (1835) “The Student’s Manual: Designed, by Specific Directions, to Aid in Forming and Strengthening the Intellectual and Moral Character and Habits of the Student.” J.H. Butler. Northampton, MA.

To get an idea of how repressed the culture was at the time (a fairly recent trend, in the history of the world), Todd gave these warnings in Latin, since he could not bear to do so in English. Before the passage, he declares:

“While I thus briefly allude to these wanderings of the imagination, by which the mind is debilitated, the soul polluted by a stain which tears cannot wash out, nor the deepest repentance cannot fully do away, I cannot satisfy my conscience without going a step further, and saying what others have, to my certain knowledge, wished to say, and ought to say, but which no one has yet had the courage to say, in tones loud and distinct ... I have chosen to risk the charge of pedantry rather than not say what I could not say in English.”

He also warned of “bad books” and was no fan of Lord Byron:

“I believe a single page may be selected from Byron, which has done more to hurt the mind and heart of the young man than all his writings have ever done good. But he will quickly pass from notice, and is doomed to be exiled from the libraries of all virtuous men.”

The entire work is interesting and gives insight into the mindset of the period, particularly attitudes toward women. This manual was incredibly popular at the time and was reprinted 21 times.

Available from Google Books: [Link](#)

181. Eugène Brieux, Harry Pollard. (1914) “Damaged Goods.” Mutual Film Corporation. Edendale, CA.
182. Katie Johnson. (2003) “Damaged Goods: Sex Hysteria and the Prostitute Fatale.” *Theatre Survey*. Vol. 44, No. 1, pp. 43-67.
183. Jacqueline Darroch, David Landry, Susheela Singh. (2000) “Changing Emphases in Sexuality Education In U.S. Public Secondary Schools, 1988-1999.” *Family Planning Perspectives*. Vol. 32, No. 6, pp. 204-212.
184. Sexuality Information and Education Council of the United States. (2011) “Dedicated Federal Abstinence-only-until-Marriage Funding by Year. (1982–2010).” SEICUS. Washington, DC.
185. Summary based on federal definition of abstinence-only education. (The first two sentences address items A-F; G is about drugs and alcohol, and H is about self-sufficiency.)
U.S. Social Security Act, §510(b)(2).
186. Cynthia Dalliard. (2002) “Abstinence Promotion and Teen Family Planning: The Misguided Drive for Equal Funding.” *Guttmacher Report on Public Policy*. Vol. 5, pp. 1-3. Guttmacher Institute. Washington, DC.

187. The total number fluctuated over the years. As of Aug. 2008, 25 states had refused the funds.

Mailman School of Public Health. (2008) "Accuracy, Efficacy, and Ethics of Abstinence-Only Programs Questioned by Public Health Experts." Sep. 19, 2008. Columbia University. New York, NY. [Link](#)

188. 53% of American high school juniors have had sex.

Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) "Youth Risk Behavior Surveillance — United States, 2009." Morbidity and Mortality Weekly Report (MMWR). Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.

189. Lawrence Finer. (2007) "Trends in Premarital Sex in the United States, 1954–2003." Public Health Reports. Vol. 122, No. 1, pp. 73-78.

190. A concise criticism of the panic over AIDS:

Brendan O'Neill. (2008) "The Exploitation of AIDS." The Guardian. Jun. 12, 2008. [Link](#)

191. Joy Burnham. (2005) "Fears of Children in the United States: An Examination of the American Fear Survey Schedule with 20 New Contemporary Fear items." Measurement and Evaluation in Counseling and Development. Vol. 38, No. 2, pp. 78-91.

192. Calculation based on the following data:

There were an estimated 211 cases of HIV reported in people under 14 reported in the US in 2005, the year of the fear study.

Centers for Disease Control and Prevention. (2007) "Cases of HIV infection and AIDS in the United States and Dependent Areas, 2005." HIV/AIDS Surveillance Report. Vol. 17, Revised Edition. Centers for Disease Control and Prevention. Atlanta, GA.

An estimated 61,125,728 people in the US 14 or younger in 2008.

US Census Data. (2008) "General Demographic Characteristics: 2008 Population Estimates." United States Census Bureau. Washington, DC. [Link](#)

193. These items did not make the top ten list for all ages. "Getting my girlfriend pregnant" did make the top ten list of fears among males (at #9), and if looking at females 15 to 18 only, "getting pregnant" was at #7.

Joy Burnham. (2005) "Fears of Children in the United States: An Examination of the American Fear Survey Schedule with 20 New Contemporary Fear items." Measurement and Evaluation in Counseling and Development. Vol. 38, No. 2, pp. 78-91.

194. King Holmes, Ruth Levine, Marcia Weaver. (2004) "Effectiveness of Condoms in Preventing Sexually Transmitted Infections." Bulletin of the World Health Organization. Vol. 84, No. 6, pp. 454-461.

Owen Devine, Sevgi Aral. (2004) “The Impact of Inaccurate Reporting of Condom Use and Imperfect Diagnosis of Sexually Transmitted Disease Infection in Studies of Condom Effectiveness: A Simulation-Based Assessment.” *Sexually Transmitted Diseases*. Vol. 31, No. 10, pp. 588-595.

S.C. Weller, K. Davis-Beaty. (2002) “Condom Effectiveness in Reducing Heterosexual HIV Transmission.” *Cochrane Database of Systematic Reviews*. No. 1.

An oft-cited piece of research supporting the claims of eliminating the risk is:

Isabelle De Vincenzi. (1994) “A Longitudinal Study of Human Immunodeficiency Virus Transmission by Heterosexual Partners.” *The New England Journal of Medicine*. Vol. 331, No. 6, pp. 341-346.

In this study, despite an estimated 15,000 acts of intercourse, HIV was not transmitted between any of 124 serodiscordant couples who used condoms consistently for vaginal and anal sex. Among 121 serodiscordant couples who used condoms inconsistently, 8 people infected their partners over the course of 20 months.

However, the participants in this study were all established couples, and the HIV-positive partners acquired the virus far enough in the past to know they were infected. As detailed in the final section of this book, the timing plays an important role in the spread of the disease, so these findings would not necessarily apply to casual sex partners.

195. Sagamore Institute. (2007) “Review of Comprehensive Sex Education Curricula.” *The Administration for Children and Families*. US Department of Health and Human Services. Washington, DC.
196. Markus Steiner. (1999) “Contraceptive Effectiveness: What Should the Counseling Message Be?” *Journal of the American Medical Association*. Vol. 282, No. 15, pp. 1405-1407.
197. Jacqueline Darroch, David Landry, Susheela Singh. (2000) “Changing Emphases in Sexuality Education in U.S. Public Secondary Schools, 1988-1999.” *Family Planning Perspectives*. Vol. 32, No. 6, pp. 204-212.
198. Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.
199. Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.
200. Laetitia Lemoine. (2010) “Teen Sexual Behavior and Contraceptive Use: Data from the Youth Risk Behavior Survey, 2009.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

201. Willard Cates, Jr. (1996) “Contraception, Unintended Pregnancies, and Sexually Transmitted Diseases: Why Isn’t a Simple Solution Possible?” *American Journal of Epidemiology*. Vol. 143, No. 4, pp. 311-318.
202. “Contraceptive,” which is a device or drug intended to prevent impregnation, not “method of birth control,” which would include abstinence.
203. Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
204. This study was requested by Sen. Tom Coburn and Sen. Rick Santorum in 2005 and found that seven of eight programs reviewed had positive impacts. Sagamore Institute. (2007) “Review of Comprehensive Sex Education Curricula.” The Administration for Children and Families, US Department of Health and Human Services. Washington, DC.
205. Centers for Disease Control and Prevention. (2008) “Summaries of Highlighted Research, 11 March 2008.” Centers for Disease Control and Prevention. Atlanta, GA.
206. UNICEF. (2001). “A League Table of Teenage Births in Rich Nations.” *Innocenti Report Card*. No. 3. UNICEF Innocenti Research Centre, Florence.
- The National Campaign to Prevent Teen and Unplanned Pregnancy. (2010) “Teen Birth Rates: How Does the United States Compare?” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
- Source for United States:
- Joyce Martin, Brady Hamilton, Paul Sutton, Stephanie Ventura, T.J. Mathews, Michelle Osterman. (2010). “Births: Final Data for 2008.” *National Vital Statistics Reports*. Vol. 59, No. 1, pp. 1-72. Centers for Disease Control. Atlanta, GA.
- For other countries:
- United Nations Statistical Division. (2011) “Demographic Yearbook 2008.” United Nations. New York, NY.
- The US rate had been lowering for several years, but recently saw a reversal.
- Kathryn Kost, Stanley Henshaw, Liz Carlin. (2010). “U.S. Teenage Pregnancies, Births and Abortions: National and State Trends and Trends by Race and Ethnicity.” *Guttmacher Institute*. Washington, DC.
207. With proper use, testing suggests latex condoms can provide a 97.4% success rate for blocking HIV and other small viruses.
- David Lytle, Licia Routson, Gerald Seaborn, Lurlene Dixon, Harry Bushar, Howard Cyr. (1997) “An In Vitro Evaluation of Condoms as Barriers to a Small Virus.” *Sexually Transmitted Diseases*. Vol. 24, No. 3, pp. 161-164.
208. The higher failure rate is primarily due to inconsistent use, not failures of condoms themselves.

Markus Steiner, Willard Cates, Lee Warner. (1999) “The Real Problem with Male Condoms Is Nonuse.” *Sexually Transmitted Diseases*. Vol. 26, No. 8, pp. 459-462.

Markus Steiner. (1999) “Contraceptive Effectiveness: What Should the Counseling Message Be?” *Journal of the American Medical Association*. Vol. 282, No. 15, pp. 1405-1407.

209. Those who waited until age 17 or older to have sex reported more pleasure, and people who waited longer also felt less regret, guilt, and anxiety.

Susan Sprecher, Anita Barbee, Pepper Schwartz. (1995). “‘Was It Good for You Too?’ Gender Differences in First Sexual Intercourse Experiences.” *Journal of Sex Research*. Vol. 32, No. 1, pp. 3-15.

Daniel Wight, Alison Parkes, Vicki Strange, Elizabeth Allen, Chris Bonell, Marion Henderson. (2008) “The Quality of Young People’s Heterosexual Relationships: A Longitudinal Analysis of Characteristics Shaping Subjective Experience.” *Perspectives on Sexual and Reproductive Health*. Vol. 40, No. 4, pp. 226-237.

In another study, 70% of women who had sex before age 16 said they regretted it.

Nigel Dickson, Charlotte Paul, Peter Herbison, Phil Silva. (1997) “First Sexual Intercourse: Age, Coercion, and Later Regrets Reported by a Birth Cohort.” Vol. 316, No. 7124, pp. 29.

210. Susan Moore, Doreen Rosenthal. (1991) “Adolescent Invulnerability and Perceptions of AIDS Risk.” *Journal of Adolescent Research*. Vol. 6, No. 2, 164-180.
211. Arland Thornton, Linda Young-DeMarco. (2001). “Four Decades of Trends in Attitudes toward Family Issues in the United States: The 1960s through the 1990s.” *Journal of Marriage and the Family*. Vol. 63, No. 4, pp. 1009-1037.
212. When asked the following question: “Suppose a parent or other adult tells a teen the following: ‘I strongly encourage you not to have sex. However, if you do, you should use birth control or protection.’ Do you think this is a message that encourages teens to have sex?” almost 40% of adults said “yes,” but over 70% of teens said “no.”
- Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.
213. Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

These findings have been reaffirmed with every major study of comprehensive sex education, even the ones most critical of it.

214. 53% of American high school juniors have had sex.

Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.

215. One recent study of note that supports abstinence-based education is:

John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010). “Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months.” *Archives of Pediatrics & Adolescent Medicine*. Vol. 164, No. 2, pp. 152-159.

It was the “first randomized controlled study to demonstrate that an abstinence-only intervention reduced the percentage of adolescents who reported any sexual intercourse for a long period.”

University of Pennsylvania. (2010) “Onset of Sexual Activity in Tweens Delayed by Theory-Based Abstinence-Only Program.” Press Release. Feb. 1, 2010. [Link](#)

Another study:

George Denny, Michael Young. (2006) “An Evaluation of an Abstinence-Only Sex Education Curriculum: An 18-Month Follow-Up.” *Journal of School Health*. Vol. 76, No. 8, pp. 414-422.

216. “Despite searching 30 databases, 16,765 abstracts, and unpublished literature ... No trial described procedures for randomly assigning participants or concealing the allocation sequence ... The majority of abstinence-only evaluations avoided [biological and behavioral] outcomes or failed to define them specifically ... Inappropriate analyses and selective reporting threaten the internal and external validity of trial results ... Without rigorous fidelity monitoring, few studies could reliably indicate whether interventions were actually delivered as planned.”

Kristen Underhill, Don Operario, Paul Montgomery. (2007) “Reporting Deficiencies in Trials of Abstinence-only Programmes for HIV Prevention.” *AIDS*. Vol. 21, No. 2, pp. 266-268.

217. Marion Howard, Judith Blamey McCabe. (1990) “Helping Teenagers Postpone Sexual Involvement.” *Family Planning Perspectives*. Vol. 22, No. 1, pp. 21-26.

218. Douglas Kirby, Meg Korpi, Richard Barth, Helen Cagampang. (1997) “The Impact of the Postponing Sexual Involvement Curriculum among Youths in California.” *Family Planning Perspectives*. Vol. 29, No. 3, pp. 100-108.

Christopher Trenholm, Barbara Devaney, Ken Fortson, Lisa Quay, Justin Wheeler, Melissa Clark. (2007) “Impacts of Four Title V, Section 510 Abstinence Education Programs.” *Mathematica Policy Research*. Princeton, NJ.

219. Especially the earliest programs.

Douglas Kirby. (1984) “Sexuality Education: An Evaluation of Programs and Their Effects.” Network Publications. Santa Cruz, CA.

220. There are literally hundreds of well-structured studies that come to nearly identical conclusions. One of the best overviews is:

Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

Following are findings from some other representative studies:

Comprehensive sex education led to less teen pregnancy, slightly less sex. Abstinence-only education had no significant effect on pregnancy and did not reduce the likelihood of sex.

Pamela Kohler, Lisa Manhart, William Lafferty. (2008) “Abstinence-Only and Comprehensive Sex Education and the Initiation of Sexual Activity and Teen Pregnancy.” *Journal of Adolescent Health*. Vol. 42, No. 4, pp. 344-351.

Abstinence-only education is ineffective. Declines in pregnancy rates are almost entirely attributable to increased contraceptive use, not abstinence education, since sexual activity barely changed, but contraceptive use rose greatly and pregnancy dropped greatly.

John Santelli, Laura Duberstein Lindberg, Lawrence Finer, Susheela Singh. (2007) “Explaining Recent Declines in Adolescent Pregnancy in the United States: The Contribution of Abstinence and Improved Contraceptive Use.” *American Journal of Public Health*. Vol. 97, No. 1, pp. 150-156.

“Although abstinence is a healthy behavioral option for teens, abstinence as a sole option for adolescents is scientifically and ethically problematic. A recent emphasis on abstinence-only programs and policies appears to be undermining more comprehensive sexuality education and other government-sponsored programs. We believe that abstinence-only education programs, as defined by federal funding requirements, are morally problematic, by withholding information and promoting questionable and inaccurate opinions. Abstinence-only programs threaten fundamental human rights to health, information, and life.”

John Santelli, Mary Ott, Maureen Lyon, Jennifer Rogers, Daniel Summers, Rebecca Schleifer. (2006) “Abstinence and Abstinence-Only Education: A Review of U.S. Policies and Programs.” *Journal of Adolescent Health*. Vol. 38, No. 1, pp. 72-81.

221. Kristen Underhill, Paul Montgomery, Don Operario. (2007) “Sexual Abstinence Only Programmes to Prevent HIV Infection in High Income Countries: Systematic Review.” *British Medical Journal*. Vol. 335, No. 7613, pp. 248-259.

222. “Several abstinence programs, including abstinence-until-marriage programs, have been rigorously evaluated in experimental studies with large

samples and found to have no overall impact on delay of initiation of sex, age of initiation of sex, return to abstinence, number of sexual partners, or use of condoms or other contraceptives ... A few other abstinence programs have been evaluated less rigorously, with smaller, quasi-experimental designs...In sum, no abstinence program has strong evidence of delaying sex, but one has modest evidence of doing so.”

Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

223. Most teens who had not had sex stated that their reason for not having sex yet was that doing so would be against their religion or morals. This was also the most popular answer in the previous study in 2002.
- Joyce Abma, Gladys Martinez, Casey Copen. (2010) “Teenagers in the United States: Sexual Activity, Contraceptive Use, and Childbearing, National Survey of Family Growth 2006-2008.” Vital and Health Statistics. Vol. 23, No. 30, pp. 1-47.
224. In essence, the Abstinence-Only message (delivered outside formal education programs) had already persuaded a large percentage of the population, giving it a very high baseline, making further incremental improvement difficult. On the other hand, the Safe Sex approach was encouraging behavior that would be very unlikely without education, giving it a low baseline, making incremental progress relatively easy to achieve.
225. American Medical Association. (2004) “Sexuality Education, Abstinence, and Distribution of Condoms in Schools.” Report No. H-170.968. American Medical Association, Chicago, IL.
226. John Anderson. (2005) “Resolution in Favor of Empirically Supported Sex Education and HIV Prevention Programs for Adolescents.” American Psychological Association. Motion passed at the Feb. 18-20, 2005 meeting of the APA Council of Representatives.
227. “Mainstream medical professional organizations, including the American College of Obstetricians and Gynecologists (ACOG), the Society for Adolescent Medicine (SAM), the American Academy of Pediatrics (AAP), the American Medical Association (AMA), and the American Public Health Association (APHA), oppose abstinence-only education and endorse comprehensive sexuality education that includes both abstinence and accurate information about contraception, human sexuality and STIs.”
- Mary Ott, John Santelli. (2007) “Abstinence and Abstinence-Only Education.” Current Opinion in Obstetrics and Gynecology. Vol. 19, No. 5, pp. 446-452.
228. Congress requested this study of Abstinence-Only programs under the Balanced Budget Act of 1997.
- Christopher Trenholm, Barbara Devaney, Ken Fortson, Lisa Quay, Justin Wheeler, Melissa Clark. (2007) “Impacts of Four Title V, Section 510

Abstinence Education Programs: Final Report.” Mathematica Policy Research. Princeton, NJ.

229. Cynthia Dalliard. (2002) “Abstinence Promotion and Teen Family Planning: The Misguided Drive for Equal Funding.” Guttmacher Report on Public Policy. Vol. 5, pp. 1-3. Guttmacher Institute. Washington, DC.
230. The total number fluctuated over the years. As of Aug. 2008, 25 states had refused the funds.

Mailman School of Public Health. (2008) “Accuracy, Efficacy, and Ethics of Abstinence-Only Programs Questioned by Public Health Experts.” Sep. 19, 2008. Columbia University. New York, NY. [Link](#)

More details:

Marissa Raymond, Lylyana Bogdanovich, Dalia Brahmi, Laura Jane Cardinal, Gulielma Leonard Fager, LeighAnn Frattarelli, Gabrielle Hecker, Elizabeth Ann Jarpe, Adam Viera, Leslie Kantor, John Santelli. (2008) “State Refusal of Federal Funding for Abstinence-Only Programs.” Sexuality Research & Social Policy. Vol. 5, No. 3, pp. 44-55.

231. Ted Carter. (2004) “Evaluation Report for The Kansas Abstinence Education Program.” Kansas Department of Health. Topeka, KS.
232. Staff Reporter. (2005) “Texas Teens Increased Sex after Abstinence Program.” Reuters. Jan. 31, 2005.

Also discussed in:

W. Joseph Wyatt. (2005) “Texas Teens Increase Sex After Abstinence Program.” Behavior Analysis Digest. Vol. 17, No. 3, pp. 9-10. (Note: Not a peer-reviewed journal.)

233. U.S. Social Security Act, §510(b)(2) defined abstinence education as a program which:

“A. Has as its exclusive purpose teaching the social, psychological, and health gains to be realized by abstaining from sexual activity;
 B. Teaches abstinence from sexual activity outside marriage as the expected standard for all school-age children;
 C. Teaches that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems;
 D. Teaches that a mutually faithful monogamous relationship in the context of marriage is the expected standard of sexual activity;
 E. Teaches that sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects;
 F. Teaches that bearing children out of wedlock is likely to have harmful consequences for the child, the child’s parents, and society;
 G. Teaches young people how to reject sexual advances and how alcohol and drug use increase vulnerability to sexual advances, and
 H. Teaches the importance of attaining self-sufficiency before engaging in sexual activity.”

234. “C. Teaches that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems;”

U.S. Social Security Act, §510(b)(2)

235. “D. Teaches that a mutually faithful monogamous relationship in the context of marriage is the expected standard of sexual activity;”

U.S. Social Security Act, §510(b)(2)

Many Americans believe this, but most do not. While it is true that American society expects monogamy among married people, most individuals do not think sex among single adults is wrong.

88% of adults think cheating on a spouse is morally wrong (the highest of any activity on the poll), but only 35% think sex between unmarried adults is wrong – about the same as gambling or overeating.

Pew Research Center. (2006) “A Barometer of Modern Morals.” Pew Research Center. Washington, DC.

Also, most Americans 18-64 do not have negative views on living together before marriage. Most consider living in unmarried households to have either no effect or a positive effect on children. Most consider a couple who have lived together for five years to be just as committed in their relationship as a couple that has been married for the same time. About half think that living together before marriage makes couples less likely to get divorced; less than a third think it makes them more likely to divorce.

Lydia Saad. (2008) “By Age 24, Marriage Wins Out.” Gallup. Washington, DC. Aug. 8, 2008. [Link](#)

236. “E. Teaches that sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects;”

U.S. Social Security Act, §510(b)(2)

Author’s Note: There is a huge difference between “is likely” and “increases the likelihood.” This could have been fixed simply by saying “more likely” instead of “likely,” as research supports that idea, but as it is worded, it is a throwback to the 1800s-era quackery mentioned at the beginning of the section.

To be even more accurate, “marriage” could have been changed to “a monogamous relationship,” as the impact of infidelity, regardless of marital status, has been widely documented.

237. Total federal funds allocated for abstinence-only education since 1996 exceeded \$1.5 billion in 2010.

Sexuality Information and Education Council of the United States. (2011) “Dedicated Federal Abstinence-Only-Until-Marriage Funding by Year. (1982–2010).” SEICUS. Washington, DC.

238. A Congressional report of federally funded abstinence-only curricula found that over 80 percent of curricula supported by the US Department of Health & Human Services contained major false, misleading, or distorted information about reproductive health. Specifically: False information about the effectiveness of contraceptives; false information about the risks of abortion; religious beliefs as scientific fact; stereotypes about boys and girls as scientific fact; and medical and scientific errors of fact.

Henry Waxman. (2004) "The Content of Federally Funded Abstinence-Only Education Programs." US House of Representatives Committee on Government Reform, Special Investigations Division. Washington, DC.

239. 78.4% of Americans identified as belonging to a Christian faith.

The Pew Forum on Religion & Public Life. (2008) "U.S. Religious Landscape Survey." Pew Research Center. Washington, DC.

240. Jacqueline Darroch, David Landry, Susheela Singh. (2000) "Changing Emphases in Sexuality Education In U.S. Public Secondary Schools, 1988-1999." *Family Planning Perspectives*. Vol. 32, No. 6, pp. 204-212.

241. Simon Forrest, Vicki Strange, Ann Oakley, The RIPPLE Study Team. (2004) "What Do Young People Want from Sex Education? The Results of a Needs Assessment from a Peer-Led Sex Education Programme." *Culture, Health and Sexuality*. Vol. 6, No. 4, pp. 337-354.

Lynda Measor, Coralie Tiffin, Katrina Miller. (2000) "Young People's Views on Sex Education: Education, Attitudes and Behaviour." RoutledgeFalmer. New York, NY.

242. Of note, this study found an abstinence-only program to have no effect on preventing virgins from having sex, or from convincing non-virgins to stop having sex, but curiously, those who were already having sex reported lower frequency and fewer partners after the program.

Elaine Borawski, Erika Trapl, Loren Lovegreen, Natalie Colabianchi, Tonya Block. (2005) "Effectiveness of Abstinence-Only Intervention in Middle School Teens." *American Journal of Health Behavior*. Vol. 29, No. 5, pp. 423-434.

243. Human Rights Watch. (2002) "Ignorance Only: HIV/AIDS, Human Rights, and Federally Funded Abstinence-Only Programs in the United States." Human Rights Watch. Vol. 14, No. 5, pp. 1-47. (Note: Not a peer-reviewed journal.)

244. For example, the "Be Proud! Be Responsible!" curriculum had quite a few explicit tips for enhancing sexual pleasure. These were presented in the context of encouraging condom use, but many parents would find their nature inappropriate for their children.

Sagamore Institute. (2007) "Review of Comprehensive Sex Education Curricula." The Administration for Children and Families. US Department of Health and Human Services. Washington, DC.

245. Jeremiah Films. (1991) "No Second Chance." VHS Cassette. Jeremiah Films. Jacksonville, FL.
- Some of the content is discussed in:
- Susan Rose. (2005) "Going Too Far? Sex, Sin and Social Policy." *Social Forces*. Vol. 84, No. 2, pp. 1207-1232.
246. Peter Bearman, Hannah Brückner. (2001) "Promising the Future: Virginity Pledges and First Intercourse." *American Journal of Sociology*. Vol. 106, No. 4, pp. 859-911.
- This does not suggest causality, i.e., it is not as if making a pledge caused people to not use condoms. Both being more likely to pledge and being less likely to use contraceptives are both associated with fundamentalist Christian values.
247. Jennifer Manlove, Suzanne Ryan, Kerry Franzetta. (2003) "Patterns of Contraceptive Use within Teenagers' First Sexual Relationships." *Perspectives on Sexual and Reproductive Health*. Vol. 35, No. 6, pp. 246-255.
248. Celia Lescano, Christopher Houck, Larry Brown, Glenn Doherty, Ralph DiClemente, M. Isabel Fernandez, David Pugatch, William Schlenger, Barbara Silver. (2009) "Correlates of Heterosexual Anal Intercourse among At-Risk Adolescents and Young Adults." *American Journal of Public Health*. Vol. 99, No. 6, pp. 1131-1136.
249. Jamie Mullaney. (2006). "Everyone Is NOT Doing It: Abstinence and Personal Identity." University of Chicago Press. Chicago, IL.
250. Angela Lipsitz, Paul Bishop, Christine Robinson. (2003) "Virginity Pledges: Who Takes Them and How Well Do They Work?" Findings presented at the 15th Annual Convention of the American Psychological Society in Atlanta, GA. May 31, 2003.
251. Female pledgers reported six times as much oral sex, males reported four times as much anal sex. All had the same rate of STDs as non-pledgers, but were less likely to get tested or use condoms.
- Hannah Brückner, Peter Bearman. (2005) "After the Promise: The STD Consequences of Adolescent Virginity Pledges." *Journal of Adolescent Health*. Vol. 36, No. 4, pp. 271-278.
252. "Anal sex was much more common among adolescents who had initiated vaginal sex (21%) compared to virgins (1%)."
- Laura Lindberg, Rachel Jones, John Santelli. (2008) "Non-Coital Sexual Activities Among Adolescents." *Journal of Adolescent Health*. Vol. 42, No. 2, Supplement 1, pp. 44-45.
- This is similar to earlier findings, suggesting no rise.
- Mark Schuster, Robert Bell, David Kanouse. (1996) "The Sexual Practices of Adolescent Virgins: Genital Sexual Activities of High School Students Who Have Never Had Vaginal Intercourse." *American Journal of Public Health*. Vol. 86, No. 11, pp. 1570-1576.

253. Melina Bersamin, Samantha Walker, Elizabeth Waiters, Deborah Fisher, Joel Grube. (2005) “Promising to Wait: Virginity Pledges and Adolescent Sexual Behavior.” *Journal of Adolescent Health*. Vol. 36, No. 5, pp. 428-443.
254. Janet Elise Rosenbaum. (2009) “Patient Teenagers? A Comparison of the Sexual Behavior of Virginity Pledgers and Matched Nonpledgers” *Pediatrics*. Vol. 123, No. 1, pp. e110-e120.
255. This study found comprehensive sex education to significantly reduce pregnancy and slightly reduce sex. Abstinence-only education had no effect on either. This report was noted since neither approach reduced STDs, and the rates of pregnancy, although lowered, remained high.
- Pamela Kohler, Lisa Manhart, William Lafferty. (2008) “Abstinence-Only and Comprehensive Sex Education and the Initiation of Sexual Activity and Teen Pregnancy.” *Journal of Adolescent Health*. Vol. 42, No. 4, pp. 344-351.
256. “...better that ten guilty persons escape than that one innocent suffer.”
- William Blackstone. (1773) “Commentaries on the Laws of England.” Fifth Edition. Clarendon Press, Oxford.
257. In this passage, the Lord says he would spare the entire city of Sodom if he found ten righteous people there.
- King James Bible. (1980) Cambridge University Press. Cambridge, England. Genesis 18:20-33.
258. 93% of adults and 87% of teens said it was very or somewhat important that teens be given a strong message that they should not have sex until they are at least out of high school.
- Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
259. Laura Stepp. (2007) “Study Casts Doubt on Abstinence-Only Programs.” *The Washington Post*. Apr. 14, 2007. [Link](#)
260. John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010). “Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months.” *Archives of Pediatrics & Adolescent Medicine*. Vol. 164, No. 2, pp. 152-159.
- It was the “first randomized controlled study to demonstrate that an abstinence-only intervention reduced the percentage of adolescents who reported any sexual intercourse for a long period.”
- University of Pennsylvania. (2010) “Onset of Sexual Activity in Tweens Delayed by Theory-Based Abstinence-Only Program.” Press Release. Feb. 1, 2010. [Link](#)
- “The findings are the first clear evidence that an abstinence program could work.”
- Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” *The Washington Post*. Feb. 2, 2010. [Link](#)

261. Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” The Washington Post. Feb. 2, 2010. [Link](#)
262. Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” The Washington Post. Feb. 2, 2010. [Link](#)
- Three years earlier, Sarah Brown had said of the Mathematica report to Congress:
- “There’s not a lot of good news here for people who pin their hopes on abstinence-only education...This is the first study with a solid, experimental design, the first with adequate numbers and long-term follow-up, the first to measure behavior and not just intent. On every measure, the effectiveness of the programs was flat.”
- Laura Stepp. (2007) “Study Casts Doubt on Abstinence-Only Programs.” The Washington Post. Apr. 14, 2007. [Link](#)
263. Mara Gay. (2010) “Study: Teaching Abstinence Works Better Than Sex Ed.” AOL News. Feb. 2, 2010. [Link](#)
264. Tamar Lewin. (2010) “Quick Response to Study of Abstinence Education.” The New York Times. Feb. 2, 2010. [Link](#)
265. John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010). “Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months.” Archives of Pediatrics & Adolescent Medicine. Vol. 164, No. 2, pp. 152-159.
266. Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” The Washington Post. Feb. 2, 2010. [Link](#)
267. Rob Stein. (2010) “Abstinence-Only Programs Might Work, Study Says.” The Washington Post. Feb. 2, 2010. [Link](#)
268. Mara Gay. (2010) “Study: Teaching Abstinence Works Better Than Sex Ed.” AOL News. Feb 2, 2010. [Link](#)
269. Jeffrey Weiss. (2010) “Abstinence-Only Sex Education Works, Study Finds, but Lessons Murky.” Dallas Morning News. Feb. 8, 2010. [Link](#)
270. David Muir, Hanna Siegel. (2010) “‘Abstinence-Only’ Education Gets a Boost.” ABC News. Feb. 2, 2010. [Link](#)
271. Jeffrey Weiss. (2010) “Abstinence-Only Sex Education Works, Study Finds, but Lessons Murky.” Dallas Morning News. Feb. 8, 2010. [Link](#)
272. “Historically in the United States as well as in many other cultures, young women have sought to maintain virginity until marriage, seeing it as precious, whereas young men have been encouraged to lose their virginity, often seeing it as a stigma.”
- Laura Carpenter. (2002). “Gender and the Meaning and Experience of Virginity Loss in Contemporary United States.” Gender and Society. Vol. 16, No. 3, pp. 345-365.
273. 61% of teens agreed that teen boys often receive the message that they are supposed to have sex. 59% agreed that teen girls often receive the message

that attracting boys and looking sexy is one of the most important things they can do.

Bill Albert. (2007) “With One Voice 2007: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

274. 73% of teen boys and 78% of teen girls said they did not believe it is embarrassing for teens to admit they are virgins. 75% overall, up from 73% from 2003. 22% of teens, 42% of adults said they believed it is embarrassing for teens to admit they are virgins.

Bill Albert. (2007) “With One Voice 2007: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

275. Teens overwhelmingly say their parents influence their decisions about sex, more than all other external sources combined, including friends, teachers, sex educators, religious leaders, and the media.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

The impact is also supported by research. This study, for example, finds the impact of parents to be dramatically higher than a formal sex education program, even when delivering the same message.

Richard Crosby, Amy Hanson, Kristin Rager. (2009) “The Protective Value of Parental Sex Education: A Clinic-Based Exploratory Study of Adolescent Females.” *Journal of Pediatric and Adolescent Gynecology*. Vol. 22, No. 3, pp. 189-192.

276. Most virgin teens said their reason for not having sex yet was that doing so would be against their religion or morals. This was also the most popular answer in the previous study in 2002.

Joyce Abma, Gladys Martinez, Casey Copen. (2010) “Teenagers in the United States: Sexual Activity, Contraceptive Use, and Childbearing, National Survey of Family Growth 2006-2008.” *Vital and Health Statistics*. Vol. 23, No. 30, pp. 1-47.

277. Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

Sue Alford. (2008) “Science and Success, Second Edition: Sex Education and Other Programs that Work to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections.” *Advocates for Youth*. Washington, DC.

278. In 1999, sex education typically began in the fifth grade.

David Landry, Susheela Singh, Jacqueline Darroch. (2000) “Sexuality Education in Fifth and Sixth Grades in U.S. Public Schools, 1999.” *Family Planning Perspectives*. Vol. 32, No. 5, pp. 212-219.

279. The program in the University of Pennsylvania study discussed earlier taught students in the sixth and seventh grade. Although this program has not been tested with older students yet, logic would suggest that it would become less effective as students became older and more began having sex.

John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010). “Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months.” *Archives of Pediatrics & Adolescent Medicine*. Vol. 164, No. 2, pp. 152-159.

280. Largely anecdotal evidence, but widely reported in the media.

Lisa Remez. (2000) “Oral Sex among Adolescents: Is It Sex or Is It Abstinence?” *Family Planning Perspectives*. Vol. 32, No. 6, pp. 298-304.

John Stossel. (2006) “Sex in Middle School? ‘Just Say No’ Doesn’t Cut It in Keeping Kids from Sex.” *ABC News*. Dec. 6, 2006. [Link](#)

Laura Sessions Stepp. (1999) “Unsettling New Fad Alarms Parents: Middle School Oral Sex.” *The Washington Post*. Jul. 8, 1999. p. A1. [Link](#)

281. Patricia Hersch. (1999) “A Tribe Apart: A Journey into the Heart of American Adolescence.” Ballantine Books. New York, NY.
282. Bonnie Halpern-Felsher, Jodi Cornell, Rhonda Kropp, Jeanne Tschann. (2005) “Oral Versus Vaginal Sex among Adolescents: Perceptions, Attitudes, and Behavior.” *Pediatrics*. Vol. 115, No. 4, pp. 845-851.
283. About 32% of high school freshmen have had sex, and that figure increases by roughly 10% each year.

9th grade: 31.6%; 10th grade: 40.9%; 11th grade: 53.0%; 12th grade: 62.3%.

Danice Eaton, Laura Kann, Steve Kinchen, Shari Shanklin, James Ross, Joseph Hawkins, William Harris, Richard Lowry, Tim McManus, David Chyen, Connie Lim, Lisa Whittle, Nancy Brener, Howell Wechsler. (2010) “Youth Risk Behavior Surveillance — United States, 2009.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 59, No. SS-5, pp. 1-142. Centers for Disease Control and Prevention. Atlanta, GA.

284. 41% of parents thought MTV’s “16 and Pregnant” glamorizes teen pregnancy, while 82% of teens thought it “helps teens better understand the challenges of pregnancy and parenthood.”

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

285. Eight in 10 teens said they knew everything they needed to avoid an unplanned pregnancy, yet half said they knew nothing or little about how to use condoms.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

286. Susan Cohen. (2004) “Beyond Slogans: Lessons from Uganda’s Experience with ABC and HIV/AIDS.” *Reproductive Health Matters*. Vol. 12, No. 23, pp. 132-135.

287. The AWAKE method is fictional and is not intended to represent any known method. Some notes:

The phrase “before graduating” is used instead of “in high school” or “as a teenager” both to encourage graduation as well as to place focus on the personal advantages of delaying sex and its connection to academic performance, rather than tying it to an age or stage of life that young people yearn to grow beyond. This phrase would also allow parents and educators to demonstrate the benefits of delaying sex throughout college for those who go, although it would not be the focus in high school due to the time horizon of students being too far in the future to be persuasive.

“Keep your promise” presumptively assumes monogamy, and uses more personal and emotionally persuasive language than discussing monogamy directly.

The emphasis on condoms was changed to “every time” because adolescents already report fairly high rates of using condoms; however, just like every other group, they do not use them consistently.

Debby Herbenick, Michael Reece, Vanessa Schick, Stephanie A. Sanders, Brian Dodge, J. Dennis Fortenberry. (2010) “Condom Use Rates in a National Probability Sample of Males and Females Ages 14 to 94 in the United States.” *The Journal of Sexual Medicine*. Vol. 7, Suppl. 5, pp. 266-276.

288. Mark Murave, Roy Baumeister, Dianne Tice. (1999) “Longitudinal Improvement of Self-Regulation through Practice: Building Self-Control Strength through Repeated Exercise.” *The Journal of Social Psychology*. Vol. 139, No. 4, pp. 446-457.

289. The impact of self-efficacy on health and decision-making is widely documented. A good place to start:

Ann O’Leary. (1985) “Self-Efficacy and Health.” *Behaviour Research and Therapy*. Vol. 23, No. 4, pp. 437-451.

290. Karen Hacker, Yared Amare, Nancy Strunk, Leslie Horst. (2000) “Listening to Youth: Teen Perspectives on Pregnancy Prevention.” *Journal of Adolescent Health*. Vol. 26, No. 4, pp. 279-288.

Denise Hallfors, Martha Waller, Daniel Bauer, Carol Ford, Carolyn Halpern. (2005) “Which Comes First in Adolescence—Sex and Drugs or Depression?” *American Journal of Preventive Medicine*. Vol. 29, No. 3, pp. 163-170.

291. Theoretical future research. However, this work suggests that adhering to abstinence would be associated with a wide variety of other positive behaviors. Of note:

“Perceived academic and self-regulatory efficacy concurrently and longitudinally deterred transgressiveness both directly and by fostering prosocialness and adherence to moral self-sanctions for harmful conduct...Moral disengagement and prosocialness affected transgressiveness through the mediating influence of irascible affectivity and hostile rumination. Ruminative affectivity, in turn, both concurrently and longitudinally affected transgressiveness. Moral disengagement also contributed independently to variance in transgressiveness over time.”

Albert Bandura, Gian Vittorio Caprara, Claudio Barbaranelli, Concetta Pastorelli, Camillo Regalia. (2001) “Sociocognitive Self-Regulatory Mechanisms Governing Transgressive Behavior.” *Journal of Personality and Social Psychology*. Vol. 80, No. 1, pp. 125-135.

292. Theoretical future research. Based on the fact that the abstinence-only program in the University of Pennsylvania study included eight hours of instruction, plus follow-up sessions, whereas students normally only received an hour for a comparable lesson.

Jeffrey Weiss. (2010) “Abstinence-Only Sex Education Works, Study Finds, but Lessons Murky.” *Dallas Morning News*. Feb. 8, 2010. [Link](#)

293. The youngest students are often taught lessons like this today, but this new approach would make several changes. First, it would provide a rich source of research-based lessons rather than the widely inconsistent and burdensome approach currently used. Second, it would get students used to the subject early, accepting it just like any other subject, which becomes more important at later ages. Most important, it continues non-academic lessons past the point at which students transition from having one teacher to having separate teachers for each subject (which normally happens in middle school), since after this point non-academic lessons all but stop (in public schools).

294. This was already a feature in many sex education programs due to intoxication being a primary risk factor, as well as other independent interventions. The previously stated benefits would again apply.

David Landry, Jacqueline Darroch, Susheela Singh, Jenny Higgins. (2003) “Factors Associated with the Content of Sex Education in U.S. Public Secondary Schools.” *Perspectives on Sexual and Reproductive Health*. Vol. 35, No. 6, pp. 261-269.

295. 9% of public school principals listed teaching moral values among the top three goals of their school.

Kerry Gruber, Susan Wiley, Stephen Broughman, Gregory Strizek, Marisa Burian-Fitzgerald. (2002) “Schools and Staffing Survey, 1999-2000: Overview of the Data for Public, Private, Public Charter, and Bureau of

Indian Affairs Elementary and Secondary Schools.” US Department of Education, National Center for Education Statistics. Washington, DC.

296. 66% of private school principals listed academic excellence among the top three goals of their school; 64% listed religious development.

Kerry Gruber, Susan Wiley, Stephen Broughman, Gregory Strizek, Marisa Burian-Fitzgerald. (2002) “Schools and Staffing Survey, 1999-2000: Overview of the Data for Public, Private, Public Charter, and Bureau of Indian Affairs Elementary and Secondary Schools.” US Department of Education, National Center for Education Statistics. Washington, DC.

297. Caveat: Although private schools do have better overall test scores in math and reading, statistical analysis shows this to be more closely related to race and income than to type of school.

Martha Naomi Alt, Katharin Peter. (2002) “Findings from the Condition of Education 2002: Private Schools - A Brief Portrait.” US Department of Education, National Center for Education Statistics. Washington, DC.

298. The impact of teen pregnancy alone, on both students with children and their classmates, would have a substantial effect. Teen pregnancy has a two-way relationship with academic performance. Most teen mothers never graduate from high school.

Kate Perper, Kristen Peterson, Jennifer Manlove. (2010) “Diploma Attainment among Teen Mothers.” Fact Sheet. Publication #2010-01. Child Trends. Washington, DC.

Also, high grades and planning to attend college are associated with lower rates of teen pregnancy.

Douglas Kirby. (2002) “The Impact of Schools and School Programs upon Adolescent Sexual Behavior.” *The Journal of Sex Research*. Vol. 39, No. 11, pp. 27-33.

299. Sarah Kliff. (2009) “The Future of Abstinence.” *Newsweek/The Daily Beast*. Oct. 26, 2009. [Link](#)
300. Although they were already widely used in the 1960s, birth control pills were not guaranteed to be legally available to unmarried women in all states until 1972.

US Supreme Court. (1972) *Eisenstadt v. Baird*, 405 U.S. 438.

301. Divorce rates doubled in the US between the mid-1960s and mid-1970s. Also, divorce rates were abnormally high in the 1970s, abnormally low in the 1950s, and have since leveled out to expected levels.

Betsey Stevenson, Justin Wolfers. (2007) “Marriage and Divorce: Changes and Their Driving Forces.” *Journal of Economic Perspectives*. Vol. 21, No. 2, pp. 27-52.

See also:

Susan Carter, Scott Sigmund Gartner, Michael Haines, Alan Olmstead, Richard Sutch, Gavin Wright. (2006) "Historical Statistics of the United States: Millennial Edition." Cambridge University Press. New York, NY.

302. The first no-fault divorces in the US were signed into law by then-Governor Ronald Reagan in 1969. The law did not take effect until the beginning of the following year.

Aidan Gough. (1970) "Community Property and Family Law: The Family Law Act of 1969." Vol. 1970, No. 1, pp. 272-305.

303. Marriage rates peaked in 1970 and declined steadily through 2009.

W. Bradford Wilcox, Elizabeth Marquardt, David Popenoe, Barbara Dafoe Whitehead. (2010) "The State of Our Unions 2010 – When Marriage Disappears: The New Middle America." National Marriage Project, University of Virginia. Charlottesville, VA.

304. Gregory Herek, Eric Glunt. (1988) "An Epidemic of Stigma: Public Reactions to AIDS." *American Psychologist*. Vol. 43, No. 11, pp. 886-891.

305. There has been almost no change in the annual number of new HIV cases since 1991. Note: Since the total number of people living with the disease has grown, the ratio of those with the disease infecting new people each year has declined, but the total number of new cases is a more commonly used benchmark.

H. Irene Hall, Ruiguang Song, Philip Rhodes, Joseph Prejean, Qian An, Lisa Lee, John Karon, Ron Brookmeyer, Edward Kaplan, Matthew McKenna, Robert Janssen. (2008) "Estimation of HIV Incidence in the United States." *Journal of the American Medical Association*. Vol. 300, No. 5, pp. 520-529.

306. The vast majority of people living with AIDS in the United States today contracted the disease through male-to-male sexual contact.

Centers for Disease Control and Prevention. (2011) "AIDS Surveillance - Trends (1985-2009)." Centers for Disease Control and Prevention. Atlanta, GA.

"In 2007, MSM were 44 to 86 times as likely to be diagnosed with HIV compared with other men, and 40 to 77 times as likely as women...A recent CDC study found that in 2008 one in five (19%) MSM in 21 major US cities were infected with HIV, and nearly half (44%) were unaware of their infection."

Centers for Disease Control and Prevention. (2010) "HIV among Gay, Bisexual and Other Men Who Have Sex with Men (MSM)." Centers for Disease Control and Prevention. Atlanta, GA.

"In 2009, MSM accounted for 57% of all persons and 75% of men with a diagnosis of HIV infection in the 40 states with longstanding, confidential, name-based HIV infection reporting."

Lucia Torian, Mi Chen, Philip Rhodes, H. Irene Hall. (2011) "HIV Surveillance --- United States, 1981-2008." *Morbidity and Mortality Weekly*

Report (MMWR). Vol. 60, No. 21, pp. 689-693. Centers for Disease Control and Prevention. Atlanta, GA.

“MSM are the only risk group in the U.S. in which new HIV infections are increasing. While new infections have declined among both heterosexuals and injection drug users, the annual number of new HIV infections among MSM has been steadily increasing since the early 1990s.”

Centers for Disease Control and Prevention. (2010) “HIV and AIDS among Gay and Bisexual Men.” Centers for Disease Control and Prevention. Atlanta, GA.

307. About 70% of gay men identify as Christians. Only 2.3% identify as any other religion. The rest are agnostic, atheistic, or have no stated religion.

Gregory Herek, Aaron Norton, Thomas Allen, Charles Sims. (2010) “Demographic, Psychological, and Social Characteristics of Self-Identified Lesbian, Gay, and Bisexual Adults in a US Probability Sample.” *Sexuality Research and Social Policy*. Vol. 7, No. 3, pp. 176-200.

308. 78.4% of Americans identified as belonging to a Christian faith.

The Pew Forum on Religion & Public Life. (2008) “U.S. Religious Landscape Survey.” Pew Research Center. Washington, DC.

309. 39% of Americans on average attend church weekly; only 7% of gay men do the same. 80% of gay men attend only a few times a year or never at all.

The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center. Washington, DC.

310. The clearest examples are Leviticus 18:22 and 20:13. Other commonly cited passages are Romans 1:26-27, I Timothy 1:9-10, and I Corinthians 6:9.

Note: Like every passage in the Bible, many debate the translation, interpretation, and social context of these passages.

311. This is also a point of heated debate. For example, a common counterargument to the fact that Jesus never condemned homosexuality is to say that Jesus did not actually say much at all in the Bible, and that there are other activities that Jesus never talked about specifically, such as torture or child molestation, that are also considered wrong.

There are references in the New Testament that condemn homosexual acts, such as Romans 1:26-27, but detractors argue that the writer (Paul) also held other views (such as supporting slavery) that are seen as wrong today.

Like most debates over the Bible, it is unlikely that this will ever be resolved, as virtually every argument on either side contends that some verses are applicable while others are not.

312. Jesus reduces the 613 commandments of Jewish law to two:

“Jesus said unto him, Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind. This is the first and great

commandment. And the second is like unto it, Thou shalt love thy neighbour as thyself. On these two commandments hang all the law and the prophets.”

Matthew 22:37-40.

Jesus refutes another common rabbinic teaching:

“Ye have heard that it hath been said, Thou shalt love thy neighbour, and hate thine enemy. But I say unto you, Love your enemies, bless them that curse you, do good to them that hate you, and pray for them which despitefully use you, and persecute you”

Matthew 5:43-44.

Paul says that Jesus’ sacrifice frees his followers from having to follow the mitzvot:

“Blotting out the handwriting of ordinances that was against us, which was contrary to us, and took it out of the way, nailing it to his cross; And having spoiled principalities and powers, he made a shew of them openly, triumphing over them in it.

...

Wherefore if ye be dead with Christ from the rudiments of the world, why, as though living in the world, are ye subject to ordinances, (Touch not; taste not; handle not; Which all are to perish with the using;) after the commandments and doctrines of men? Which things have indeed a shew of wisdom in will worship, and humility, and neglecting of the body: not in any honour to the satisfying of the flesh.”

Paul 2:14-15,20-23.

King James Bible. (1980) Cambridge University Press. Cambridge, England.

313. Jesus is condemned to death for claiming to be the son of God. The details vary, but the events are similar in other books.

“But he held his peace, and answered nothing. Again the high priest asked him, and said unto him, Art thou the Christ, the Son of the Blessed? And Jesus said, I am: and ye shall see the Son of man sitting on the right hand of power, and coming in the clouds of heaven. Then the high priest rent his clothes, and saith, What need we any further witnesses? Ye have heard the blasphemy: what think ye? And they all condemned him to be guilty of death.”

King James Bible. (1980) Cambridge University Press. Cambridge, England. Matthew 5:43-44. Mark 14:61.

314. “Thou shalt not lie with mankind, as with womankind: it is abomination.”

King James Bible. (1980) Cambridge University Press. Cambridge, England. Leviticus 18:22.

315. “And all that have not fins and scales in the seas, and in the rivers, of all that move in the waters, and of any living thing which is in the waters, they shall be an abomination unto you.”

Leviticus 11:10.

Other commonly cited examples of laws that are no longer followed today by Christians include forbidding wearing mixed fiber clothing, trimming a beard, or getting a tattoo.

Leviticus 19:19,27-28.

King James Bible. (1980) Cambridge University Press. Cambridge, England.

316. Most Americans say they receive “quite a bit” or “a great deal” of guidance from religion in their daily lives. By comparison, only one in five gay men say the same. The rest of the LGBT community reported higher numbers, but still significantly lower than the national average. (To be precise, the survey included gay men, lesbians, and bisexuals of both sexes, but no transgender people. However, this relatively small segment of an already small group would not significantly change aggregate results.)

Gregory Herek, Aaron Norton, Thomas Allen, Charles Sims. (2010) “Demographic, Psychological, and Social Characteristics of Self-Identified Lesbian, Gay, and Bisexual Adults in a US Probability Sample.” *Sexuality Research and Social Policy*. Vol. 7, No. 3, pp. 176-200.

Gay men are 66% more likely to be atheists, agnostics, or have no religion than Americans on average. Comparative data source:

The Pew Forum on Religion & Public Life. (2008) “U.S. Religious Landscape Survey.” Feb. 2008. Pew Research Center. Washington, DC.

317. 39% of Americans on average attend church weekly; only 7% of gay men do the same. 80% of gay men attend only a few times a year or never at all.

The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center. Washington, DC.

318. Most people said that their church speaks out on homosexuality, and only 4% said that the church said it should be accepted.

The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center, Washington, DC.

319. Louis Theroux (Writer), Geoffrey O’Connor (Director). (2007) “The Most Hated Family in America.” BBC. Broadcast Apr. 1, 2007.

According to the home page of the Westboro Baptist Church website:

“‘GOD HATES FAGS’ -- though elliptical -- is a profound theological statement, which the world needs to hear more than it needs oxygen, water and bread.”

Westboro Baptist Church. (2011) GodHatesFags.com. Sep. 2, 2011. [Link](#)

Of note: Some have responded to the Westboro Baptist Church’s aforementioned infamous “GOD HATES FAGS” signs with their own

parodical “GOD HATES FIGS” signs, an idea which refers to scripture, albeit obliquely:

Jesus curses a fig tree:

Matthew 21:19

Jesus forbids his disciples to eat figs:

Mark 11:13-14.

King James Bible. (1980) Cambridge University Press. Cambridge, England.

See also:

Dan Savage. (2009) “God Hates Figs.” *The Stranger*. Mar. 12, 2009. [Link](#)

320. As of August 2011, same-sex marriage was allowed by six state governments (Connecticut, Iowa, Massachusetts, New Hampshire, New York, and Vermont) as well as in Washington, DC and by various Native American governments. Other states offered legal unions for same-sex couples, but they were not called marriages.
321. While most views on homosexuality in general are roughly evenly split, negative views, such as believing it to be a sin to engage in homosexual behavior, are much more prevalent among those with a high level of religious commitment.
- The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center. Washington, DC.
322. Of those who attend religious services weekly, only 22% believe that homosexuality is something people are born with and most believe it is something that can be changed.
- The Pew Forum on Religion & Public Life. (2003) “Religious Beliefs Underpin Opposition to Homosexuality.” Pew Research Center. Washington, DC.
323. Nine out of 10 gay men say they have no choice at all regarding their sexual orientation.
- Gregory Herek, Aaron Norton, Thomas Allen, Charles Sims. (2010) “Demographic, Psychological, and Social Characteristics of Self-Identified Lesbian, Gay, and Bisexual Adults in a US Probability Sample.” *Sexuality Research and Social Policy*. Vol. 7, No. 3, pp. 176-200.
324. About “Born This Way,” Elton John said: “This is the new ‘I Will Survive.’ That was the gay anthem. This is the new gay anthem. Actually, it’s not a gay anthem — it can apply to anybody.”
- Tanner Stransky. (2010) “Elton John: Q&A.” *Entertainment Weekly*. No. 1124. Oct. 15, 2010. [Link](#)
325. Suzi Parker. (2010) “Lady Gaga’s ‘Don’t Ask, Don’t Tell’ Activism Is Getting Results.” *AOL News*. Sep. 16, 2010. [Link](#)

326. Ann Powers. (2011) “First Take: Lady Gaga’s ‘Born This Way.’” National Public Radio. May 18, 2011. [Link](#)
- Dan Zak. (2009) “Lady Gaga, Already a Gay Icon, Shows She’s an Activist Too.” The Washington Post. Oct. 12, 2009. [Link](#)
327. “In 2007, MSM were 44 to 86 times as likely to be diagnosed with HIV compared with other men, and 40 to 77 times as likely as women...A recent CDC study found that in 2008 one in five (19%) MSM in 21 major US cities were infected with HIV, and nearly half (44%) were unaware of their infection.”
- Centers for Disease Control and Prevention. (2010) “HIV among Gay, Bisexual and Other Men Who Have Sex with Men (MSM).” Centers for Disease Control and Prevention. Atlanta, GA.
328. “Relatively” means “relative to straight men.” Note: This compares men who are openly non-monogamous. (How many people are secretly non-monogamous, regardless of gender or sexual orientation, is very hard to quantify.)
- In this study, over half of gay male couples were either in open relationships (47%) or in relationships in which one partner thought it was monogamous and the other did not (8%). This amount dwarfs even the highest estimates of heterosexual couples in relationships that are not stated to be monogamous.
- Colleen Hoff, Sean Beougher, Deepalika Chakravarty, Lynae Darbes, Torsten Neilands. (2010) “Relationship Characteristics and Motivations behind Agreements among Gay Male Couples: Differences by Agreement Type and Couple Serostatus.” *AIDS Care*. Vol. 22, No. 7, pp. 827-835.
- Roger Rubin. (2001) “Alternative Lifestyles Revisited, or Whatever Happened to Swingers, Group Marriages, and Communes?” *Journal of Family Issues*. Vol. 22, No. 6, pp. 711-726.
329. Richard Wolitski. (2006) “The Emergence of Barebacking among Gay and Bisexual Men in the United States: A Public Health Perspective.” (Perry Halkitis, Leo Wilton, Jack Drescher, Eds.) In “Barebacking: Psychosocial and Public Health Approaches.” Haworth Medical Press. Binghamton, New York.
330. Almost half of all gay men surveyed agreed with the statement: “My membership in the gay community is an important reflection of who I am.”
- Gregory Herek, Aaron Norton, Thomas Allen, Charles Sims. (2010) “Demographic, Psychological, and Social Characteristics of Self-Identified Lesbian, Gay, and Bisexual Adults in a US Probability Sample.” *Sexuality Research and Social Policy*. Vol. 7, No. 3, pp. 176-200.
331. This research is central to the conclusion that a social movement as described in this story could lead to people acting more responsibly – more specifically, using condoms more often.

This meta-study examined 67 independent samples, which measured 23 psychosocial predictors of intentions to use condoms (which, in turn, is a strong predictor of actual use).

According to this research, what matters most to people, more than knowledge about HIV/AIDS, and even more than the belief that condoms could save their own lives, are their perceptions about whether they think their sexual partners think it is normal to use one. That is, all things considered, the factor that would most likely make someone likely to intend to use a condom is believing their partner will expect to use one. Also high on the list, just below subjective norms (e.g., “Most people who are important to me think that I should use a condom the next time that I have sex with someone new”) and attitudes toward condoms, is previous condom usage. Taken together, the data suggests that, should it become widely believed that most prospective partners would expect to use a condom, it would lead far more people to use them. As more people used them, previous usage would also reinforce their intentions, and the resulting dynamic would make the behavior self-sustaining.

The conclusions drawn from the theory of reasoned action and the theory of planned behavior can also be applied to other sexual behavior presented in the context of safety and responsibility, such as delaying sex for a prescribed period of time (e.g., “Most people who are important to me think that I should wait three months before having sex with someone new”).

Paschal Sheeran, Steven Taylor. (1999) “Predicting Intentions to Use Condoms: A Meta-Analysis and Comparison of the Theories of Reasoned Action and Planned Behavior.” *Journal of Applied Social Psychology*. Vol. 29, No. 8, pp. 1624-1675.

Also, research on social norms as they specifically relate to health decisions made in private:

Kevin McCaul, Ann Sandgren, Katherine O’Neill, Verlin Hinsz. (1993) “The Value of the Theory of Planned Behavior, Perceived Control, and Self-Efficacy for Predicting Health-Protective Behaviors.” *Basic and Applied Social Psychology*. Vol. 14, No. 2, pp. 231-252.

- 332. Peter Bearman, Hannah Brückner. (2001) “Promising the Future: Virginity Pledges and First Intercourse.” *American Journal of Sociology*. Vol. 106, No. 4, pp. 859-911.
- 333. Centers for Disease Control and Prevention. (2010) “HIV in the United States.” Centers for Disease Control and Prevention. Atlanta, GA.
- 334. 75% of single parents are female. (These statistics include a small portion of people of either sex who purposefully become single parents.)
US Census Bureau. (2010) “Family Type by Presence and Age of Own Children.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.
- 335. Thomas Quinn, Julie Overbaugh. (2005) “HIV/AIDS in Women: An Expanding Epidemic.” *Science*. Vol. 308, No. 5728, pp. 1582-1583.

Beena Varghese, Julie Maher, Thomas Peterman, Bernard Branson, Richard Steketee. (2002) “Reducing the Risk of Sexual HIV Transmission: Quantifying the Per-Act Risk for HIV on the Basis of Choice of Partner, Sex Act, and Condom Use.” *Sexually Transmitted Diseases*. Vol. 29, No. 1, pp. 38-43.

In 2009, roughly twice as many women contracted HIV from men as men got it from women.

Centers for Disease Control and Prevention. (2011) “Diagnoses of HIV Infection and AIDS in the United States and Dependent Areas, 2009.” *HIV Surveillance Report*. Vol. 21. Centers for Disease Control and Prevention. Atlanta, GA.

336. Roy Baumeister, Kathleen Catanese, Kathleen Vohs. (2001) “Is There a Gender Difference in Strength of Sex Drive? Theoretical Views, Conceptual Distinctions, and a Review of Relevant Evidence.” *Personality and Social Psychology Review*. Vol. 5, No. 3, pp. 242-273.

337. Ann Blanc. (2001) “The Effect of Power in Sexual Relationships on Sexual and Reproductive Health: An Examination of the Evidence.” *Studies in Family Planning*. Vol. 32, No. 3, pp. 189-213.

Among many other problems, some of these double standards lead women to pretend not to want sex even when they do, which leads to a host of other problems.

Charlene Muehlenhard, Lisa Hollabaugh. (1988) “Do Women Sometimes Say No When They Mean Yes? The Prevalence and Correlates of Women’s Token Resistance to Sex.” *Journal of Personality and Social Psychology*. Vol. 54, No. 5, pp. 872-879.

338. Pepper Schwartz, Virginia Rutter. (1998). “The Gender of Sexuality.” Pine Forge Press. Thousand Oaks, CA.

339. This study defines a “hookup” as “a sexual encounter, usually lasting only one night, between two people who are strangers or brief acquaintances.” Researchers found that 78% of college students had participated in a hookup. Half of the students who said they experienced hookup sex said they never saw their sexual partner again.

Elizabeth Paul, Brian McManus, Allison Hayes. (2000) “Hookups’: Characteristics and Correlates of College Students’ Spontaneous and Anonymous Sexual Experiences.” *Journal of Sex Research*. Vol. 37, No. 1, pp. 76-88.

340. Catherine Grello, Deborah Welsh, Melinda Harper. (2006) “No Strings Attached: The Nature of Casual Sex in College Students.” *The Journal of Sex Research*. Vol. 43, No. 3, pp. 255-267.

341. In this study of college students who had experienced a one-night stand, males rated their experiences overwhelmingly more positively than women. Men were also likely to secretly want their friends to know, and their only significant worry was causing a pregnancy or catching a disease.

In the same study, most women regretted the experience overall and would not want to repeat it. The biggest difference between the sexes was how much women regretted it because they felt used. Women also regretted letting themselves down and worried their reputations would be damaged.

Anne Campbell. (2008) "The Morning After the Night Before: Affective Reactions to One-Night Stands among Mated and Unmated Women and Men." *Human Nature*. Vol. 19, No. 2, pp. 157-173.

342. The differences between male and female attitudes toward sex is a widely researched topic in psychology. This piece explores one of the most major differences.

Roy Baumeister. (2000) "Gender Differences in Erotic Plasticity: The Female Sex Drive as Socially Flexible and Responsive." *Psychological Bulletin*. Vol. 126, No. 3, pp. 347-374.

343. Emily Impett, Letitia Anne Peplau. (2002) "Why Some Women Consent to Unwanted Sex with a Dating Partner: Insights from Attachment Theory." *Psychology of Women Quarterly*. Vol. 26, No. 4, pp. 360-370.

Lucia O'Sullivan, Elizabeth Rice Allgeier. (1998) "Feigning Sexual Desire: Consenting to Unwanted Sexual Activity in Heterosexual Dating Relationships." *The Journal of Sex Research*. Vol. 35, No. 3, pp. 234-243.

Sarah Walker. (1997) "When 'No' Becomes 'Yes': Why Girls and Women Consent to Unwanted Sex." *Applied and Preventive Psychology*. Vol. 6, No. 3, pp. 157-166.

344. William Flack, Kimberly Daubman, Marcia Caron, Jenica Asadorian, Nicole D'Aureli, Shannon Gigliotti, Anna Hall, Sarah Kiser, Erin Stine. (2007) "Risk Factors and Consequences of Unwanted Sex among University Students: Hooking Up, Alcohol, and Stress Response." *Journal of Interpersonal Violence*. Vol. 22, No. 2, pp. 139-157.

345. Elaine Eshbaugh, Gary Gute. (2008) "Hookups and Sexual Regret among College Women." *The Journal of Social Psychology*. Vol. 148, No. 1, pp. 77-90.

This view that "hooking up" is harmless may be furthered by careless mainstream media reporting about research that finds that it is not as harmful as previously thought, which some misinterpret as meaning it is not harmful.

For example, this research finds that casual sex does not cause permanent psychological damage.

Marla Eisenberg, Diann Ackard, Michael Resnick, Dianne Neumark-Sztainer. (2009) "Casual Sex and Psychological Health among Young Adults: Is Having 'Friends with Benefits' Emotionally Damaging?" *Perspectives on Sexual and Reproductive Health*. Vol. 41, No. 4, pp. 231-237.

This research finds that people who do not value relationships as much tend toward shorter, more casual relationships. Among people open to long-term

relationships, having sex quickly with a new partner does not doom a relationship.

Anthony Paik. (2010) “Hookups, Dating, and Relationship Quality: Does the Type of Sexual Involvement Matter?” *Social Science Research*. Vol. 39, No. 5, pp. 739-753.

346. 70% of teen girls believe it is very important that teens be encouraged to delay sex.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

347. Roy Baumeister, Kathleen Catanese, Kathleen Vohs. (2001) “Is There a Gender Difference in Strength of Sex Drive? Theoretical Views, Conceptual Distinctions, and a Review of Relevant Evidence.” *Personality and Social Psychology Review*. Vol. 5, No. 3, pp. 242-273.
348. Roy Baumeister, Kathleen Vohs. (2004) “Sexual Economics: Sex as Female Resource for Social Exchange in Heterosexual Interactions.” *Personality and Social Psychology Review*. Vol. 8, No. 4, pp. 339-363.

Note: With the obvious exception of prostitution, the researchers do not suggest men buy sex with money directly, but rather expend other resources, such as time and material goods, in a more general effort to attain it.

349. Clark Warburton. (1932) “The Economic Results of Prohibition.” *Columbia University Press*. New York, NY.
350. Steven Landsburg. (2007) “More Sex Is Safer Sex: The Unconventional Wisdom of Economics.” *Simon & Schuster*. New York, NY.
351. James Prescott. (1975) “Body Pleasure and the Origins of Violence.” *Bulletin of the Atomic Scientists*. Vol. 31, No. 9, pp. 10-20.
352. Martin Weinberg, Ilsa Lottes, Frances Shaver. (2000) “Sociocultural Correlates of Permissive Sexual Attitudes: A Test of Reiss’s Hypotheses about Sweden and the United States.” *The Journal of Sex Research*. Vol. 37, No. 1, pp. 44-52.
- Eric Widmer, Judith Treas, Robert Newcomb. (1998) “Attitudes Toward Nonmarital Sex in 24 Countries.” *Journal of Sex Research*. Vol. 35, No. 4, pp. 349-358.
353. United Nations. (2010) “Homicide Statistics, Trends (2003-2008).” *United Nations Office on Drugs and Crime*. Vienna, Austria.
354. Caryl Rusbult. (1983) “A Longitudinal Test of the Investment Model: The Development (and Deterioration) of Satisfaction and Commitment in Heterosexual Involvements.” *Journal of Personality and Social Psychology*. Vol. 45, No. 1, pp. 101-117.
355. Shari Dworkin, Lucia O’Sullivan. (2005) “Actual Versus Desired Initiation Patterns among a Sample of College Men: Tapping Disjunctures within

Traditional Male Sexual Scripts.” *The Journal of Sex Research*. Vol. 42, No. 2, pp. 150-158.

David Wyatt Seal, Anke Ehrhardt. (2003) “Masculinity and Urban Men: Perceived Scripts for Courtship, Romantic, and Sexual Interactions with Women.” *Culture, Health & Sexuality*. Vol. 5, No. 4, pp. 295-319.

Arland Thornton, Linda Young-DeMarco. (2001) “Four Decades of Trends in Attitudes toward Family Issues in the United States: The 1960s through the 1990s.” *Journal of Marriage and Family*. Vol. 63, No. 4, pp. 1009-1037.

Jean Twenge. (1997) “Attitudes toward Women, 1970–1995: A Meta-Analysis.” *Psychology of Women Quarterly*. Vol. 21, No. 1, pp. 35-51.

James Check, Neil Malamuth. (1985) “An Empirical Assessment of Some Feminist Hypotheses about Rape.” *International Journal of Women’s Studies*. Vol. 8, No. 4, pp. 414-423.

John Collins, Judith Kennedy, Ronald Francis. (1976) “Insights into a Dating Partner’s Expectations of How Behavior Should Ensurue during the Courtship Process.” *Journal of Marriage and Family*. Vol. 38, No. 2, pp. 373-378.

356. 50% of teen boys believe it is very important that teens be encouraged to delay sex. (Compared to 70% of teen girls.)

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

357. Pamela Regan, Lauren Levin, Susan Sprecher, F. Scott Christopher, Rodney Cate. (2000) “Partner Preferences: What Characteristics Do Men and Women Desire in Their Short-Term Sexual and Long-Term Romantic Partners?” *Journal of Psychology & Human Sexuality*. Vol. 12, No. 3, pp. 1-21.

Douglas Kenrick, Edward Sadalla, Gary Groth, Melanie Trost. (1990) “Evolution, Traits, and the Stages of Human Courtship: Qualifying the Parental Investment Model.” *Journal of Personality*. Vol. 58, No. 1, pp. 97-116.

358. Both of these strategies teach more than this, but boiled down, these are the most fundamental requirements.
359. Edwin Locke, Gary Latham. (2002) “Building a Practically Useful Theory of Goal Setting and Task Motivation: A 35-Year Odyssey.” *American Psychologist*. Vol. 57, No. 9, pp. 705-717.

360. While most research in the field of goal-setting has historically revolved around a work environment, this piece addresses setting goals to change behavior to improve health.

Victor Strecher, Gerard Seijts, Gerjo Kok, Gary Latham, Russell Glasgow, Brenda DeVellis, Ree Meertens, David Bulger. (1995) “Goal Setting as a Strategy for Health Behavior Change.” *Health Education Quarterly*. Vol. 22, No. 2, pp. 190-200.

361. Edwin Locke, Gary Latham. (1990) “A Theory of Goal Setting & Task Performance.” Prentice Hall. Englewood Cliffs, NJ.

This concept has been supported in hundreds of independent studies.

Gary Latham, Edwin Locke. (1991) “Self-Regulation through Goal Setting.” *Organizational Behavior and Human Decision Processes*. Vol. 50, No. 2, pp. 212-247.

362. Robert Wood, Anthony Mento, Edwin Locke. (1987) “Task Complexity as a Moderator of Goal Effects: A Meta-Analysis.” *Journal of Applied Psychology*. Vol. 72, No. 3, pp. 416-425.

Edwin Locke, Elizabeth Frederick, Cynthia Lee, Philip Bobko. (1984) “Effect of Self-Efficacy, Goals, and Task Strategies on Task Performance.” *Journal of Applied Psychology*. Vol. 69, No. 2, pp. 241-251.

363. Icek Ajzen. (2002) “Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior.” *Journal of Applied Social Psychology*. Vol. 32, No. 4, pp. 665-668.

364. Mark Conner, Paul Norman. (Eds.) (2005) “Predicting Health Behaviour: Research and Practice with Social Cognition Models.” Second Edition. Open University Press. Berkshire, England.

Victor Strecher, Gerard Seijts, Gerjo Kok, Gary Latham, Russell Glasgow, Brenda DeVellis, Ree Meertens, David Bulger. (1995) “Goal Setting as a Strategy for Health Behavior Change.” *Health Education Quarterly*. Vol. 22, No. 2, pp. 190-200.

Gary Latham, Edwin Locke. (1991) “Self-Regulation through Goal Setting.” *Organizational Behavior and Human Decision Processes*. Vol. 50, No. 2, pp. 212-247.

365. Essentially all Safe Sex programs talked about condoms, but only half demonstrated the correct way to use them.

Jacqueline Darroch, David Landry, Susheela Singh. (2000) “Changing Emphases in Sexuality Education In U.S. Public Secondary Schools, 1988-1999.” *Family Planning Perspectives*. Vol. 32, No. 6, pp. 204-212.

366. Eight in 10 teens said they knew everything they needed to avoid an unplanned pregnancy, yet half said they knew nothing or little about how to use condoms.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.

367. Gary Latham, Edwin Locke. (1991) “Self-Regulation through Goal Setting.” *Organizational Behavior and Human Decision Processes*. Vol. 50, No. 2, pp. 212-247.

368. Diana Elliott, Tavia Simmons. (2011) “Marital Events of Americans: 2009.” Report ACS-13. US Census Bureau. Washington, DC.

US Census Bureau. (2011) “2010 Current Population Survey.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.

US Census Bureau. (2010) “2009 American Community Survey.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.

These findings were widely reported.

Sabrina Tavernise. (2011) “Married Couples Are No Longer a Majority, Census Finds.” *The New York Times*. May 26, 2011. [Link](#)

Carol Morello. (2011) “As U.S. Marriage Rate Declines, Mid-Atlantic Is Mostly Average.” *The Washington Post*. Aug. 25, 2011. [Link](#)

369. Elizabeth Caucutt, Nezih Guner, John Knowles. (2002) “Why Do Women Wait? Matching, Wage Inequality, and the Incentives for Fertility Delay.” *Review of Economic Dynamics*. Vol. 5, No. 4, pp. 815-855.

Arland Thornton, Linda Young-DeMarco. (2001). “Four Decades of Trends in Attitudes toward Family Issues in the United States: The 1960s through the 1990s.” *Journal of Marriage and the Family*. Vol. 63, No. 4, pp. 1009-1037.

370. The median age of first marriage increased by one every few years.

Median age of first marriage in the United States:

1975: 23.5; 1979: 24.4; 1985: 25.5, 1991: 26.3. (Male)

1975: 21.1; 1979: 22.1; 1985: 23.0, 1991: 24.1. (Female)

US Census Bureau. (2004) “Estimated Median Age at First Marriage, by Sex: 1890 to Present.” US Department of Commerce, Economics and Statistics Administration. Washington, DC.

371. Median age for first marriage was 28.4 for males and 26.5 for females. Both ages were closer to 30 than 20 and both exhibited a sharp upward trend.

US Census Bureau. (2010) “2009 American Community Survey.” Table R1204, R1205. US Department of Commerce, Economics and Statistics Administration. Washington, DC.

372. Arnaud D’Argembeau, Gui Xue, Zhong-Lin Lu, Martial Van der Linden, Antoine Bechara. (2008) “Neural Correlates of Envisioning Emotional Events in the Near and Far Future.” *NeuroImage*. Vol. 40, No. 1, pp. 398-407.

373. Marc Wittmann, David Leland, Martin Paulus. (2007) “Time and Decision Making: Differential Contribution of the Posterior Insular Cortex and the Striatum during a Delay Discounting Task.” *Experimental Brain Research*. Vol. 179, No. 4, pp. 643-653.

Brian Knutson, Jeffrey Cooper. (2005) “Functional Magnetic Resonance Imaging of Reward Prediction.” *Current Opinion in Neurology*. Vol. 18, No. 4, pp. 411-417.

Samuel McClure, David Laibson, George Loewenstein, Jonathan Cohen. (2004) "Separate Neural Systems Value Immediate and Delayed Monetary Rewards." *Science*. Vol. 306, No. 5695, pp. 503-507.

374. Richard Meyer. (1993) "Preferences over Time." (Ralph Keeney, Howard Raiffa, Eds.) In "Decisions with Multiple Objectives: Preferences and Value Tradeoffs." Cambridge University Press. Cambridge, England.

Note: Originally published in 1976.

375. Kris Kirby, Nino Marakovic. (1995) "Modeling Myopic Decisions: Evidence for Hyperbolic Delay-Discounting within Subjects and Amounts." *Organizational Behavior and Human Decision Processes*. Vol. 64, No. 1, pp. 22-30.

376. After lengthening throughout adolescence and early adulthood, future planning becomes gradually shorter as people get older (and closer to the end of their lives).

Jari-Erik Nurmi. (1991) "How Do Adolescents See Their Future? A Review of the Development of Future Orientation and Planning." *Developmental Review*. Vol. 11, No. 1, pp. 1-59.

377. Kathleen Vohs, Brandon Schmeichel. (2003) "Self-Regulation and the Extended Now: Controlling the Self Alters the Subjective Experience of Time." *Journal of Personality and Social Psychology*. Vol. 85, No. 2, pp. 217-230.

378. Jamie Sayen. (1985) "Einstein in America: The Scientist's Conscience in the Age of Hitler and Hiroshima." Crown. New York, NY.

379. This piece makes several complex topics very accessible:

Shelley Taylor, Lien Pham, Inna Rivkin, David Armor. (1998) "Harnessing the Imagination: Mental Simulation, Self-Regulation, and Coping." *American Psychologist*. Vol. 53, No. 4, pp. 429-439.

380. Daniel Kahneman, Dale Miller. (1986) "Norm Theory: Comparing Reality to Its Alternatives." *Psychological Review*. Vol. 93, No. 2, pp. 136-153.

381. Lawrence Finer. (2007) "Trends in Premarital Sex in the United States, 1954-2003." *Public Health Reports*. Vol. 122, No. 1, pp. 73-78.

382. 78.4% of Americans identified as belonging to a Christian faith.

The Pew Forum on Religion & Public Life. (2008) "U.S. Religious Landscape Survey." Pew Research Center. Washington, DC.

383. Based on self-reported data, i.e., those who admit to having premarital sex. It is likely that even more did so but did not admit it.

384. Mark Regnerus. (2009) "The Case for Early Marriage." *Christianity Today*. Vol. 53, No. 8. Aug. 31, 2009. [Link](#)

385. Matthew Bramlett, William Mosher. (2002) "Cohabitation, Marriage, Divorce and Remarriage in the United States." *Vital and Health Statistics*. Vol. 23, No. 22, pp. 1-32.

386. Calculations based on data cited previously. Average age of marriage in 2009 (~27), thus born in 1982. Average age of marriage in 1975 (~22), thus born in 1953. In 1975, women married ~3 years after high school; men ~5 years after. In 2009, women married ~8 years after high school; men ~10.

387. Kay Herting Wahl, Anne Blackhurst. (2000) "Factors Affecting the Occupational and Educational Aspirations of Children and Adolescents." *Professional School Counseling*. Vol. 3, No. 5, pp. 367-374.

Even among those who achieve a higher education, it is difficult to predict the future. In a study of Americans who attained a bachelor's degree in 1993, only four years after graduation, almost half were working in fields unrelated to their education.

Tiffany Stringer. (2000) "Four Years after Graduation: The Class of 1993." *Occupational Outlook Quarterly*. Vol. 44, No. 4, pp. 17-29. US Department of Labor, Bureau of Labor Statistics. Washington, DC.

388. Mark Alicke. (1985) "Global Self-Evaluation as Determined by the Desirability and Controllability of Trait Adjectives." *Journal of Personality and Social Psychology*. Vol. 49, No. 6, pp. 1621-1630.

389. It has been argued that self-enhancement is unique to Western cultures, and is not found in Asian cultures.

Steven Heine, Darrin Lehman, Hazel Rose Markus, Shinobu Kitayama. (1999) "Is There a Universal Need for Positive Self-Regard?" *Psychological Review*. Vol. 106, No. 4, pp. 766-794.

East Asians are indeed more likely to take more personal responsibility for their actions.

Incheol Choi, Richard Nisbett, Ara Norenzayan. (1999) "Causal Attribution across Cultures: Variation and Universality." *Psychological Bulletin*. Vol. 125, No. 1, pp. 47-63.

However, those in Eastern cultures typically have a more collective, less unique sense of self. They do still self-enhance, but as a member of a group rather than as an individual.

Constantine Sedikides, Lowell Gaertner, Yoshiyasu Toguchi. (2003) "Pancultural Self-Enhancement." *Journal of Personality and Social Psychology*. Vol. 84, No. 1, pp. 60-79.

Constantine Sedikides, Lowell Gaertner, Jack Vevea. (2005) "Pancultural Self-Enhancement Reloaded: A Meta-Analytic Reply to Heine." *Journal of Personality and Social Psychology*. Vol. 89, No.41, pp. 539-551.

390. Justin Kruger. (1999) "Lake Wobegon Be Gone! The 'Below-Average Effect' and the Egocentric Nature of Comparative Ability Judgments." *Journal of Personality and Social Psychology*. Vol. 77, No. 2, pp. 221-232.

391. David Dunning, Judith Meyerowitz, Amy Holzberg. (1989) "Ambiguity and Self-Evaluation: The Role of Idiosyncratic Trait Definitions in Self-Serving

Assessments of Ability.” *Journal of Personality and Social Psychology*. Vol. 57, No. 6, pp. 1082-1090.

Justin Kruger. (1999) “Lake Wobegon Be Gone! The ‘Below-Average Effect’ and the Egocentric Nature of Comparative Ability Judgments.” *Journal of Personality and Social Psychology*. Vol. 77, No. 2, pp. 221-232.

392. Mark Alicke, Olesya Govorun. (2005) “The Better-Than-Average Effect.” (Mark Alicke, David Dunning, Joachim Krueger, Eds.) In “The Self in Social Judgment: Studies in Self and Identity.” Psychology Press, New York.
393. Melvin Snyder, Walter Stephan, David Rosenfield. (1976) “Egotism and Attribution.” *Journal of Personality and Social Psychology*. Vol. 33, No. 4, pp. 435-441.
394. Gifford Weary Bradley. (1978) “Self-Serving Biases in the Attribution Process: A Reexamination of the Fact or Fiction Question.” *Journal of Personality and Social Psychology*. Vol. 36, No. 1, pp. 56-71.
395. Justin Kruger, Thomas Gilovich. (2004) “Actions, Intentions, and Self-Assessment: The Road to Self-Enhancement Is Paved with Good Intentions.” *Personality and Social Psychology Bulletin*. Vol. 30, No. 3, pp. 328-339.
396. Daniel Gilbert, Patrick Malone. (1995) “The Correspondence Bias.” *Psychological Bulletin*. Vol. 117, No. 1, pp. 21-38.

Note: The correspondence bias is also known as the fundamental attribution error.

397. Emily Pronin, Daniel Lin, Lee Ross. (2002) “The Bias Blind Spot: Perceptions of Bias in Self Versus Others.” *Personality and Social Psychology Bulletin*. Vol. 28, No. 3, pp. 369-381.
398. Shelley Taylor. (1991) “Asymmetrical Effects of Positive and Negative Events: The Mobilization-Minimization Hypothesis.” *Psychological Bulletin*. Vol. 110, No. 1, pp. 67-85.
399. The United States has the second highest traffic-related death rate (per capita) of all developed countries. (Greece has the highest.)

World Health Organization. (2009) “Global Status Report on Road Safety: Time for Action.” World Health Organization. Geneva, Switzerland.

400. 93% of American drivers think they are among the top 50% of drivers when evaluating driving skill.

Ola Svenson. (1981) “Are We All Less Risky and More Skillful Than Our Fellow Drivers?” *Acta Psychologica*. Vol. 47, No. 2, pp. 143-148.

A later study found that the vast majority rated themselves as above average, but also below a “very good driver.”

Iain McCormick, Frank Walkey, Dianne Green. (1986) “Comparative Perceptions of Driver Ability –A Confirmation and Expansion.” *Accident Analysis & Prevention*. Vol. 18, No. 3, pp. 205-208.

401. Jean Halliday. (2012) “Drivers Want Alert Options, Ford-Backed Study Finds.” *Forbes*. Aug. 28, 2012. [Link](#)
402. Shelley Taylor, Jonathon Brown. (1988) “Illusion and Well-Being: A Social Psychological Perspective on Mental Health.” *Psychological Bulletin*. Vol. 103, No. 2, pp. 193-210.
403. Individualism is a predominantly Western belief, particularly strong in America.
 Harry Triandis, Robert Bontempo, Marcelo Villareal, Masaaki Asai, Nydia Lucca. (1988) “Individualism and Collectivism: Cross-Cultural Perspectives on Self-Ingroup Relationships.” *Journal of Personality and Social Psychology*. Vol. 54, No. 2, pp. 323-338.
404. Neil Weinstein. (1987) “Unrealistic Optimism about Susceptibility to Health Problems: Conclusions from a Community-Wide Sample.” *Journal of Behavioral Medicine*. Vol. 10, No. 5, pp. 481-500.
 Neil Weinstein. (1984) “Why It Won’t Happen to Me: Perceptions of Risk Factors and Susceptibility.” *Health Psychology*. Vol. 3, No. 5, pp. 431-457.
 Neil Weinstein. (1980) “Unrealistic Optimism about Future Life Events.” *Journal of Personality and Social Psychology*. Vol. 39, No. 5, pp. 806-820.
405. Author’s Note: We tend to underestimate the likelihood of most risky events, unless that particular event has affected someone close to us, in which case we tend to overestimate it instead. Either way, we’re wrong.
 Linda Perloff, Barbara Fetzler. (1986) “Self-Other Judgments and Perceived Vulnerability to Victimization.” *Journal of Personality and Social Psychology*. Vol. 50, No. 3, pp. 502-510.
406. Frank McKenna. (1993) “It Won’t Happen to Me: Unrealistic Optimism or Illusion of Control?” *British Journal of Psychology*. Vol. 84, No. 1, pp. 39-50.
407. Daniel Lapsley, Patrick Hill. (1987) “Subjective Invulnerability, Optimism Bias and Adjustment in Emerging Adulthood.” *Journal of Youth and Adolescence*. Vol. 39, No. 8, pp. 847-857.
408. Emily Pronin, Matthew Kugler. (2010) “People Believe They Have More Free Will Than Others.” *Proceedings of the National Academy of Sciences*. Vol. 107, No. 52, pp. 22469-22474.
409. Loran Nordgren, Frenk van Harreveld, Joop van der Pligt. (2009) “The Restraint Bias: How the Illusion of Self-Restraint Promotes Impulsive Behavior.” *Psychological Science*. Vol. 20, No. 12, pp. 1523-1528.
410. Janet Polivy, C. Peter Herman. (2002) “If at First You Don’t Succeed: False Hopes of Self-Change.” *American Psychologist*. Vol. 57, No. 9, pp. 677-689.
411. George Loewenstein. (1996) “Out of Control: Visceral Influences on Behavior.” *Organizational Behavior and Human Decision Processes*. Vol. 65, No. 3, pp. 272-292.

412. A special issue of the *Journal of Behavioral Decision Making* examines the role of emotion on decision-making. The following is a good overview of the articles:

Ellen Peters, Daniel Västfjäll, Tommy Gärling, Paul Slovic. (2006) "Affect and Decision Making: A 'Hot' Topic." *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 79-85.

Most conclusions can be generalized, but the most relevant articles in this context are:

Dan Ariely, George Loewenstein. (2006) "The Heat of the Moment: The Effect of Sexual Arousal on Sexual Decision Making." *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 87-98.

Peter Ditto, David Pizarro, Eden Epstein, Jill Jacobson, Tara MacDonald. (2006) "Visceral Influences on Risk-Taking Behavior." *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 99-113.

413. George Loewenstein. (1996) "Out of Control: Visceral Influences on Behavior." *Organizational Behavior and Human Decision Processes*. Vol. 65, No. 3, pp. 272-292.
414. Mark Conner, Paul Norman. (Eds.) (2005) "Predicting Health Behaviour: Research and Practice with Social Cognition Models." Second Edition. Open University Press. Berkshire, England.
415. Marc Wittmann, David Leland, Martin Paulus. (2007) "Time and Decision Making: Differential Contribution of the Posterior Insular Cortex and the Striatum During a Delay Discounting Task." *Experimental Brain Research*. Vol. 179, No. 4, pp. 643-653.
- Brian Knutson, Jeffrey Cooper. (2005) "Functional Magnetic Resonance Imaging of Reward Prediction." *Current Opinion in Neurology*. Vol. 18, No. 4, pp. 411-417.
- Samuel McClure, David Laibson, George Loewenstein, Jonathan Cohen. (2004) "Separate Neural Systems Value Immediate and Delayed Monetary Rewards." *Science*. Vol. 306, No. 5695, pp. 503-507.
416. George Loewenstein, Jennifer Lerner. (2003) "The Role of Affect in Decision Making." (Richard Davidson, Klaus Scherer, H. Hill Goldsmith. Eds.) In "Handbook of Affective Sciences." Oxford University Press. New York, NY.
417. John Bargh, Melissa Ferguson. (2000) "Beyond Behaviorism: On the Automaticity of Higher Mental Processes." *Psychological Bulletin*. Vol. 126, No. 6, pp. 925-945.
- John Bargh, Tanya Chartrand, (1999) "The Unbearable Automaticity of Being." *American Psychologist*. Vol. 54, No. 7, pp. 462-479.
418. Antoine Bechara, Antonio Damásio, Hanna Damásio, Steven Anderson. (1994). "Insensitivity to Future Consequences Following Damage to Human Prefrontal Cortex." *Cognition*. Vol. 50, No. 1, pp. 7-15.

419. Chun Siong Soon, Marcel Brass, Hans-Jochen Heinze, John-Dylan Haynes. (2008) “Unconscious Determinants of Free Decisions in the Human Brain.” *Nature Neuroscience*. Vol. 11, No. 5, pp. 543-545.
420. Maurizio Corbetta, Gordon Shulman. (2002) “Control of Goal-Directed and Stimulus-Driven Attention in the Brain.” *Nature Reviews Neuroscience*. Vol. 3, No. 3, pp. 201-215.

Note: To be perfectly accurate, the areas are not shut off so much as their input is ignored.

421. Specifically, the orbitofrontal cortex and the hypothalamus.

Edmund Rolls. (1999) “The Brain and Emotion.” Oxford University Press. New York, NY.

422. Earl Miller, Jonathan Cohen. (2001) “An Integrative Theory of Prefrontal Cortex Function.” *Annual Review of Neuroscience*. Vol. 24, No. 1, pp. 167-202.
423. Dan Ariely, George Loewenstein. (2006) “The Heat of the Moment: The Effect of Sexual Arousal on Sexual Decision Making.” *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 87-98.

Author’s Note: For an extensive overview of this research (that is also far better written than mine), read the following book, which I wish I had read before writing this section:

Dan Ariely. (2008) “Predictably Irrational: The Hidden Forces That Shape Our Decisions.” HarperCollins. New York, NY.

424. Peter Ditto, David Pizarro, Eden Epstein, Jill Jacobson, Tara MacDonald. (2006) “Visceral Influences on Risk-Taking Behavior.” *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 99-113.

Dan Ariely, George Loewenstein. (2006) “The Heat of the Moment: The Effect of Sexual Arousal on Sexual Decision Making.” *Journal of Behavioral Decision Making*. Vol. 19, No. 2, pp. 87-98.

425. Mark Muraven, Roy Baumeister. (2000) “Self-Regulation and Depletion of Limited Resources: Does Self-Control Resemble a Muscle?” *Psychological Bulletin*. Vol. 126, No. 2, pp. 247-259.

Note that although ego depletion is related to and resembles physical fatigue, they are separate phenomena.

Kathleen Vohs, Brian Glass, W. Todd Maddox, Arthur Markman. (2011) “Ego Depletion Is Not Just Fatigue: Evidence from a Total Sleep Deprivation Experiment.” *Social Psychological and Personality Science*. Vol. 2, No. 2, pp. 166-173.

426. Mark Muraven, Roy Baumeister. (2000) “Self-Regulation and Depletion of Limited Resources: Does Self-Control Resemble a Muscle?” *Psychological Bulletin*. Vol. 126, No. 2, pp. 247-259.

427. Roy Baumeister, Todd Heatherton. (1996) "Self-Regulation Failure: An Overview." *Psychological Inquiry*. Vol. 7, No. 1, pp. 1-15.
428. Roy Baumeister, Jon Faber, Harry Wallace. (1999) "Coping and Ego Depletion: Recovery after the Coping Process." (C. R. Snyder, Ed.) In "Coping: The Psychology of What Works." Oxford University Press. New York, NY.
429. Kathleen Vohs, Roy Baumeister, Brandon Schmeichel, Jean Twenge, Noelle Nelson, Dianne Tice. (2008) "Making Choices Impairs Subsequent Self-Control: A Limited-Resource Account of Decision Making, Self-Regulation, and Active Initiative." *Journal of Personality and Social Psychology*. Vol. 94, No. 5, pp. 883-898.
- Roy Baumeister, Kathleen Vohs. (2007) "Self-Regulation, Ego Depletion, and Motivation." *Social and Personality Psychology Compass*. Vol. 1, No. 1, pp. 115-128.
- Roy Baumeister, Ellen Bratslavsky, Mark Muraven, Dianne Tice. (1998) "Ego Depletion: Is the Active Self a Limited Resource?" *Journal of Personality and Social Psychology*. Vol. 74, No. 5, pp. 1252-1265.
430. Matthew Gailliot, Roy Baumeister, C. Nathan DeWall, Jon Maner, E. Ashby Plant, Dianne Tice, Lauren Brewer, Brandon Schmeichel. (2007) "Self-Control Relies on Glucose as a Limited Energy Source: Willpower Is More Than a Metaphor." *Journal of Personality and Social Psychology*. Vol. 92, No. 2, pp. 325-336.
431. Norman Pecoraro, Faith Reyes, Francisca Gomez, Aditi Bhargava, Mary Dallman. (2004) "Chronic Stress Promotes Palatable Feeding, Which Reduces Signs of Stress: Feedforward and Feedback Effects of Chronic Stress." *Endocrinology*. Vol. 145, No. 8, pp. 3754-3762.
- Mary Dallman, Norman Pecoraro, Susanne la Fleur. "Chronic Stress and Comfort Foods: Self-Medication and Abdominal Obesity." *Brain, Behavior, and Immunity*. Vol. 19, No. 4, pp. 275-280.
432. A very approachable overview of decision fatigue:
John Tierney. (2011) "Do You Suffer from Decision Fatigue?" *The New York Times*. Aug. 17, 2011. [Link](#)
433. The average person spends about 26.5 total years married.
Rose Kreider, Jason Fields. (2002) "Number, Timing, and Duration of Marriages and Divorces: 1996." US Census Bureau. Washington, DC.
434. Jay Giedd, Liv Clasen, Rhoshel Lenroot, Dede Greenstein, Gregory Wallace, Sarah Ordaz, Elizabeth Molloy, Jonathan Blumenthal, Julia Tossell, Catherine Stayer, Carole Samango-Sprouse, Dinggang Shen, Christos Davatzikos, Deborah Merke, George Chrousos. (2006) "Puberty-Related Influences on Brain Development." *Molecular and Cellular Endocrinology*. Vols. 254-255, pp. 154-162.

435. Gabrielle Oettington. (1996) "Positive Fantasy and Motivation." (Peter Gollwitzer, John Bargh, Eds.) In "The Psychology of Action: Linking Cognition and Motivation to Behavior." The Guilford Press. New York, NY.
436. Susan Moore, Doreen Rosenthal. (1991) "Adolescent Invulnerability and Perceptions of AIDS Risk." *Journal of Adolescent Research*. Vol. 6, No. 2, pp. 164-180.
437. Roy Baumeister, Todd Heatherton, Dianne Tice. (1993) "When Ego Threats Lead to Self-Regulation Failure: Negative Consequences of High Self-Esteem." *Journal of Personality and Social Psychology*. Vol. 64, No. 1, pp. 141-156.
438. Edwin Locke, Karyll Shaw, Lise Saari, Gary Latham. (1981) "Goal Setting and Task Performance: 1969-1980." *Psychological Bulletin*. Vol. 90, No. 1, pp. 125-152.
439. W. Larry Gregory, Robert Cialdini, Kathleen Carpenter. (1982) "Self-Relevant Scenarios as Mediators of Likelihood Estimates and Compliance: Does Imagining Make It So?" *Journal of Personality and Social Psychology*. Vol. 43, No. 1, pp. 89-99.
440. Jonathan Freedman, Scott Fraser. (1966) "Compliance Without Pressure: The Foot-in-the-Door Technique." *Journal of Personality and Social Psychology*. Vol. 4, No. 2, pp. 195-202.
441. Leon Festinger. (1957) "A Theory of Cognitive Dissonance." Stanford University Press. Stanford, CA.
442. Tali Sharot, Benedetto De Martino, Raymond Dolan. (2009) "How Choice Reveals and Shapes Expected Hedonic Outcome." *The Journal of Neuroscience*. Vol. 29, No. 12, pp. 3760-3765.
443. Raymond Miller, Stephanie Brickman. (2004) "A Model of Future-Oriented Motivation and Self-Regulation." *Educational Psychology Review*, Vol. 16, No. 1, pp. 9-33.
444. Jennifer Stock, Daniel Cervone. (1990) "Proximal Goal-Setting and Self-Regulatory Processes." *Cognitive Therapy and Research*. Vol. 14, No. 5, pp. 483-498.
445. Mark Murave, Roy Baumeister, Dianne Tice. (1999) "Longitudinal Improvement of Self-Regulation through Practice: Building Self-Control Strength through Repeated Exercise." *The Journal of Social Psychology*. Vol. 139, No. 4, pp. 446-457.
- John Bargh, Melissa Ferguson. (2000) "Beyond Behaviorism: On the Automaticity of Higher Mental Processes." *Psychological Bulletin*. Vol. 126, No. 6, pp. 925-945.
446. Mark Conner, Paul Norman (Eds). (2005) "Predicting Health Behaviour." Second Edition. Open University Press. Berkshire, England.
447. Albert Bandura, Robert Wood. (1989) "Effect of Perceived Controllability and Performance Standards on Self-Regulation of Complex Decision

Making.” *Journal of Personality and Social Psychology*. Vol. 56, No. 5, pp. 805-814.

448. Interestingly, even though many later differences are thought to be the product of years of socialization, some gender differences in reactance can be observed even at this young age.

Sharon Brehm, Marsha Weinraub. (1977) “Physical Barriers and Psychological Reactance: 2-Year-Olds’ Responses to Threats to Freedom.” *Journal of Personality and Social Psychology*. Vol. 35, No. 11, pp. 830-836.

449. Kevin Woller, Walter Buboltz, James Loveland. (2007) “Psychological Reactance: Examination Across Age, Ethnicity, and Gender.” *The American Journal of Psychology*. Vol. 120, No. 1, pp. 15-24.

Claude Miller, Lindsay Lane, Leslie Deatrick, Alice Young, Kimberly Potts. (2007) “Psychological Reactance and Promotional Health Messages: The Effects of Controlling Language, Lexical Concreteness, and the Restoration of Freedom.” *Human Communication Research*. Vol. 33, No. 2, pp. 219-240.

450. Joel Brockner, Melissa Elkind. (1985) “Self-Esteem and Reactance: Further Evidence of Attitudinal and Motivational Consequences.” *Journal of Experimental Social Psychology*. Vol. 21, No. 4, pp. 346-361.
451. Edmund Thomas Dowd, Fred Wallbrown, Daniel Sanders, Janice Yesenosky. (1994) “Psychological Reactance and Its Relationship to Normal Personality Variables.” *Cognitive Therapy and Research*. Vol. 18, No. 6, pp. 601-612.
- E. Thomas Dowd, Fred Wallbrown. (1993) “Motivational Components of Client Reactance.” *Journal of Counseling & Development*. Vol. 71, No. 5, pp. 533-538.

452. For the foundation of reactance theory:

Jack Brehm. (1966) “A Theory of Psychological Reactance.” Academic Press. New York, NY.

Jack Brehm. (1972) “Response to Loss of Freedom: A Theory of Psychological Reactance.” General Learning Press. Morristown, NJ.

Sharon Brehm. (1976) “The Application of Social Psychology to Clinical Practice.” Hemisphere. Washington, DC.

Sharon Brehm, Jack Brehm. (1981). “Psychological Reactance: A Theory of Freedom and Control.” Academic Press. New York, NY.

453. “...attempts to restrict a person’s freedom often produce an anticonformity...”

Sharon Brehm, Jack Brehm. (1981). “Psychological Reactance: A Theory of Freedom and Control.” Academic Press. New York, NY.

454. Mark Twain. (1894) “Pudd’nhead Wilson.” Charles L. Webster & Company. New York, NY.

455. Brad Bushman, Joanne Cantor. (2003) "Media Ratings for Violence and Sex: Implications for Policymakers and Parents." *American Psychologist*. Vol. 58, No. 2, pp. 130-141.
- Brad Bushman, Angela Stack. (1996) "Forbidden Fruit Versus Tainted Fruit: Effects of Warning Labels on Attraction to Television Violence." *Journal of Experimental Psychology: Applied*. Vol. 2, No. 3, pp. 207-226.
456. In-line citations and parentheticals omitted from quote.
- Claude Miller, Lindsay Lane, Leslie Deatruck, Alice Young, Kimberly Potts. (2007) "Psychological Reactance and Promotional Health Messages: The Effects of Controlling Language, Lexical Concreteness, and the Restoration of Freedom." *Human Communication Research*. Vol. 33, No. 2, pp. 219-240.
457. D.A.R.E. America. (2009) "D.A.R.E. 2009 Annual Report: Empowering Children to Lead Safe and Healthy Lives." D.A.R.E. America. Los Angeles, CA.
458. David Satcher. (2001) "Youth Violence: A Report of the Surgeon General." US Department of Health and Human Services. Washington, DC.
459. Dennis Rosenbaum, Gordon Hanson. (1998) "Assessing the Effects of School-Based Drug Education: A Six-Year Multilevel Analysis of Project D.A.R.E." *Journal of Research in Crime and Delinquency*. Vol. 35, No. 4, pp. 381-412.
460. Dan Werb, Edward Mills, Kora DeBeck, Thomas Kerr, Julio Montaner, Evan Wood. (2011) "The Effectiveness of Anti-Illicit-Drug Public-Service Announcements: A Systematic Review and Meta-Analysis." *Journal of Epidemiology and Community Health*. Vol. 65, No. 10, pp. 834-840.
461. Martin Fishbein, Kathleen Hall-Jamieson, Eric Zimmer, Ina von Haeften, Robin Nabi. (2002) "Avoiding the Boomerang: Testing the Relative Effectiveness of Antidrug Public Service Announcements Before a National Campaign." *American Journal of Public Health*. Vol. 92, No. 2, pp. 238-245.
462. Joseph Grandpre, Eusebio Alvaro, Michael Burgoon, Claude Miller, John Hall. (2003) "Adolescent Reactance and Anti-Smoking Campaigns: A Theoretical Approach." *Health Communication*. Vol. 15, No. 3, pp. 349-366.
463. Centers for Disease Control and Prevention. (1994) "Preventing Tobacco Use among Young People: A Report of the Surgeon General." Centers for Disease Control and Prevention. Atlanta, GA.
464. This section does not refer to ads run by the American Legacy Foundation, which is a separate organization that receives funding from the tobacco industry as a result of the Master Settlement Agreement of 1998. This describes only ads created by tobacco companies.

Perhaps one of the most insidious effects of the Master Settlement Agreement was that it paved the way for tobacco companies to start airing television ads about cigarettes again (masquerading, of course, as anti-smoking ads), which they had been banned from doing since 1971.

465. "...increased exposure to tobacco company parent-targeted smoking prevention advertising was associated with lower recall of antitobacco advertising and stronger intentions to smoke in the future for all students."
Melanie Wakefield, Yvonne Terry-McElrath, Sherry Emery, Henry Saffer, Frank Chaloupka, Glen Szczypka, Brian Flay, Patrick O'Malley, Lloyd Johnston. (2006) "Effect of Televised, Tobacco Company-Funded Smoking Prevention Advertising on Youth Smoking-Related Beliefs, Intentions, and Behavior." *American Journal of Public Health*. Vol. 96, No. 12, pp. 2154-2160.
466. Lisa Henriksen, Amanda Dauphinee, Yun Wang, Stephen Fortmann. (2006) "Industry Sponsored Anti-smoking Ads and Adolescent Reactance: Test of a Boomerang Effect." *Tobacco Control*. Vol. 15, No. 1, pp. 13-18.
Matthew Farrelly, Cheryl Heaton, Kevin Davis, Peter Messeri, James Hersey, M. Lyndon Haviland. (2002) "Getting to the Truth: Evaluating National Tobacco Countermarketing Campaigns." *American Journal of Public Health*. Vol. 92, No. 6, pp. 901-907.
467. "...the campaign slogans 'Think. Don't Smoke.' (Philip Morris) and 'Tobacco Is Whacko, if You Are a Teen' (Lorillard) are distinctly counter to recommendations made by the Columbia Expert Panel on youth tobacco countermarketing. This panel advises against directive messages such as those telling youths not to smoke and that smoking is uncool and for adults only."
Matthew Farrelly, Cheryl Heaton, Kevin Davis, Peter Messeri, James Hersey, M. Lyndon Haviland. (2002) "Getting to the Truth: Evaluating National Tobacco Countermarketing Campaigns." *American Journal of Public Health*. Vol. 92, No. 6, pp. 901-907.
468. Claude Miller, Michael Burgoon, Joseph Grandpre, Eusebio Alvaro. (2009) "Identifying Principal Risk Factors for the Initiation of Adolescent Smoking Behaviors: The Significance of Psychological Reactance." *Health Communication*. Vol. 19, No. 3, pp. 241-252.
469. Sherry Emery, Melanie Wakefield, Yvonne Terry-McElrath, Henry Saffer, Glen Szczypka, Patrick O'Malley, Lloyd Johnston, Frank Chaloupka, Brian Flay. (2005) "Televised State-Sponsored Antitobacco Advertising and Youth Smoking Beliefs and Behavior in the United States, 1999-2000." *Archives of Pediatric and Adolescent Medicine*. Vol. 159, No. 7, pp. 639-645.
Matthew Farrelly, Kevin Davis, M. Lyndon Haviland, Peter Messeri, Cheryl Heaton. (2005) "Evidence of a Dose-Response Relationship Between 'truth' Antismoking Ads and Youth Smoking Prevalence." *American Journal of Public Health*, Vol. 95, No. 3, pp. 425-431.
Melanie Wakefield, Brian Flay, Mark Nichter, Gary Giovino. (2003) "Effects of Anti-Smoking Advertising on Youth Smoking: A Review." *Journal of Health Communication*. Vol. 8, No. 3, pp. 229-247.

Matthew Farrelly, Jeffrey Niederdeppe, Jared Yarsevich. (2003) "Youth Tobacco Prevention Mass Media Campaigns: Past, Present, and Future Directions." *Tobacco Control*. Vol. 12, Suppl. 1, pp. i35-i47.

470. Claude Miller, Lindsay Lane, Leslie Deatrick, Alice Young, Kimberly Potts. (2007) "Psychological Reactance and Promotional Health Messages: The Effects of Controlling Language, Lexical Concreteness, and the Restoration of Freedom." *Human Communication Research*. Vol. 33, No. 2, pp. 219-240.

Robert Hornik. (Ed.) (2002) "Public Health Communication: Evidence for Behavior Change." Lawrence Erlbaum Associates. Mahwah, NJ.

471. Most virgin teens said their reason for not having sex yet was that doing so would be against their religion or morals. This was also the most popular answer in the previous study in 2002.

Joyce Abma, Gladys Martinez, Casey Copen. (2010) "Teenagers in the United States: Sexual Activity, Contraceptive Use, and Childbearing, National Survey of Family Growth 2006-2008." *Vital and Health Statistics*. Vol. 23, No. 30, pp.1-47.

472. W. Bradford Wilcox, Elizabeth Marquardt, David Popenoe, Barbara Dafoe Whitehead. (2010) "The State of Our Unions 2010 – When Marriage Disappears: The New Middle America." National Marriage Project, University of Virginia.

473. Religious norms are less persuasive in America than they are in less diverse areas.

Ruth Engs, David Hanson, Louis Gliksman, Cynthia Smythe. (1990) "Influence of Religion and Culture on Drinking Behaviours: A Test of Hypotheses between Canada and the USA." *British Journal of Addiction*. Vol. 85, No. 11, pp. 1475-1482.

474. Debra Ringold. (2002) "Boomerang Effects in Response to Public Health Interventions: Some Unintended Consequences in the Alcoholic Beverage Market." *Journal of Consumer Policy*. Vol. 25, No. 1, pp. 27-63.

Lillian Bensly, Rui Wu. (1991) "The Role of Psychological Reactance in Drinking Following Alcohol Prevention Messages." *Journal of Applied Social Psychology*. Vol. 21, No. 13, pp. 1111-1124.

This helps explain why the first time an abstinence-based approach was proven to work, it was with a method that presented the strategy with no moral or ethical context.

John Jemmott III, Loretta Jemmott, Geoffrey Fong. (2010) "Efficacy of a Theory-Based Abstinence-Only Intervention over 24 Months." *Archives of Pediatrics & Adolescent Medicine*. Vol. 164, No. 2, pp. 152-159.

475. When people have already displayed reluctance to a message, simply repeating it can cause them to become even less receptive.

John Cacioppo, Richard Petty. (1989) “Effects of Message Repetition on Argument Processing, Recall, and Persuasion.” *Basic and Applied Social Psychology*. Vol. 10, No. 1, pp. 3-12.

Repeating a message more than is needed to get a point across causes people to stop paying close attention.

C. Samuel Craig, Brian Sternthal, Clark Leavitt. (1976) “Advertising Wearout: An Experimental Analysis.” *Journal of Marketing Research*. Vol. 13, No. 4, pp. 365-372.

Their minds wander and they focus more on coming up with arguments than with the intended message....

John Cacioppo, Richard Petty. (1979). “Effects of Message Repetition and Position on Cognitive Response, Recall and Persuasion.” *Journal of Personality and Social Psychology*. Vol. 37, No. 1, pp. 97-109.

...even when it is restated in a variety of creative ways.

Bobby Calder, Brian Sternthal. (1980) “Television Commercial Wearout: An Information Processing View.” *Journal of Marketing Research*, Vol. 17, No. 2, pp. 173-186.

Allan Greenberg, Charles Suttoni. (1973) “Television Commercial Wearout.” *Journal of Advertising Research*. Vol. 13, No. 5, pp. 47-54.

476. Deborah Roffman. (2004) “They’ll Abstain If They’re Given Good Reasons.” *The Washington Post*. Dec. 12, 2004. p. B02. [Link](#)
477. Ruth Beyth-Marom, Baruch Fischhoff. (1999) “Adolescents’ Decisions about Risks: A Cognitive Perspective.” (John Schulenberg, Jennifer Maggs, Klaus Hurrelmann, Eds.) In “Health Risks and Developmental Transitions during Adolescence.” Cambridge University Press. Cambridge, England.
478. Interestingly, despite extremists from both camps insisting their message should stand alone, even more parents than teens wanted teens to get more information on both contraception and abstinence.
- Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.
479. Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” *The National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, DC.
480. Problem behaviors in adolescents serve “as a transition marker, a way of placing a claim on a more mature status.”
- Richard Jessor. (1987) “Problem-Behavior Theory, Psychosocial Development, and Adolescent Problem Drinking.” *British Journal of Addiction*. Vol. 82, No. 4, pp. 331-342.

This is based on an earlier theory that several “problem behaviors,” including alcohol abuse, smoking, and sex among adolescents, are related.

Richard Jessor, Shirley Jessor. (1977) "Problem Behavior and Psychosocial Development: A Longitudinal Study of Youth." Academic Press. New York, NY.

The theory was supported in:

John Donovan, Richard Jessor, Frances Costa. (1988) "Syndrome of Problem Behavior in Adolescence: A Replication." *Journal of Consulting and Clinical Psychology*. Vol. 56, No. 5, pp. 762-765.

The explanation was expanded and clarified in:

Richard Jessor. (1992) "Risk Behavior in Adolescence: A Psychosocial Framework for Understanding and Action." *Developmental Review*. Vol. 12, No. 4, pp. 374-390.

481. This study illustrates how "self vs. other" perception extends to people close to us, particularly with threats to our health.

Linda Perloff, Barbara Fetzler. (1986) "Self-Other Judgments and Perceived Vulnerability to Victimization." *Journal of Personality and Social Psychology*. Vol. 50, No. 3, pp. 502-510.

482. Sinikka Elliott. (2010) "Parents' Constructions of Teen Sexuality: Sex Panics, Contradictory Discourses, and Social Inequality." *Symbolic Interaction*. Vol. 33, No. 2, pp. 191-212.

483. 73% of parents of non-virgin 13- and 14- year olds thought their child was still a virgin. 51% of mothers of non-virgin students in grades 8-11 thought their child was still a virgin.

Hannah Brückner, Peter Bearman. (2003) "Dating Behavior and Sexual Activity of Young Adolescents: Analyses of the National Longitudinal Study of Adolescent Health" (Bill Albert, Sarah Brown, Christine Flanigan, Eds.) In "14 and Younger: The Sexual Behavior of Young Adolescents." National Campaign to Prevent Teen Pregnancy. Washington, DC. pp. 31-56.

484. Bill Albert. (2007) "With One Voice 2007: America's Adults and Teens Sound Off about Teen Pregnancy." The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
485. Bill Albert. (2010) "With One Voice 2010: America's Adults and Teens Sound Off about Teen Pregnancy." The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.
486. Megan Beckett, Marc Elliott, Steven Martino, David Kanouse, Rosalie Corona, David Klein, Mark Schuster. (2010) "Timing of Parent and Child Communication about Sexuality Relative to Children's Sexual Behaviors." *Pediatrics*. Vol. 125, No. 1, pp. 34-42.

487. Adults and teens were asked: "When it comes to your/teens' decisions about sex, who is most influential?"

"Parents" was the most popular answer among teens by far, about as popular as every other source combined, and over twice as popular as "friends."

A smaller share of adults thought that parents were as influential, and while “parents” was still the most popular answer among adults, “friends” was a close second.

Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

488. Bill Albert. (2010) “With One Voice 2010: America’s Adults and Teens Sound Off about Teen Pregnancy.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

489. Arland Thornton, Linda Young-DeMarco. (2001) “Four Decades of Trends in Attitudes toward Family Issues in the United States: The 1960s through the 1990s.” *Journal of Marriage and the Family*. Vol. 63, No. 4, pp. 1009-1037.

490. 10% said they were sure they would marry and not live with a romantic partner before marriage. All other respondents signified varying levels of uncertainty over these future decisions. Also of note, very few expected to cohabit but not marry; the majority still expect to marry.

Wendy Manning, Monica Longmore, Peggy Giordano. (2007) “The Changing Institution of Marriage: Adolescents’ Expectations to Cohabit and to Marry.” *Journal of Marriage and Family*. Vol. 69, No. 3, pp. 559-575.

491. Most research about moral disengagement is focused on violence, but the principles apply to any behavior that people can selectively view as moral or immoral.

Albert Bandura, Claudio Barbaranelli, Gian Vittorio Caprara, Concetta Pastorelli. (1996) “Mechanisms of Moral Disengagement in the Exercise of Moral Agency.” *Journal of Personality and Social Psychology*. Vol. 71, No. 2, pp. 364-374.

Albert Bandura. (2002) “Selective Moral Disengagement in the Exercise of Moral Agency.” *Journal of Moral Education*. Vol. 31, No. 2, pp. 101-119.

492. James Price Dillard, Kirsten Weber, Renata Vail. (2007) “The Relationship between the Perceived and Actual Effectiveness of Persuasive Messages: A Meta-Analysis with Implications for Formative Campaign Research.” *Journal of Communication*. Vol. 57, No. 4, pp. 613-631.

493. Joyce Wolburg. (2006) “College Students’ Responses to Antismoking Messages: Denial, Defiance, and Other Boomerang Effects.” *Journal of Consumer Affairs*. Vol. 40, No. 2, pp. 294-323.

494. Douglas Kirby. (2007) “Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.” The National Campaign to Prevent Teen and Unplanned Pregnancy. Washington, DC.

495. Jessica Fields. (2008) “Risky Lessons: Sex Education and Social Inequality.” Rutgers University Press. London, England.
496. Emily Moyer-Gusé, Robin Nabi. (2010) “Explaining the Effects of Narrative in an Entertainment Television Program: Overcoming Resistance to Persuasion.” *Human Communication Research*. Vol. 36, No. 1, pp. 26-52.
497. Quote from:
Robert Preidt. (2008) “Rap Music Glorifying Drug Use.” ABC News, Apr. 2, 2008. [Link](#)
See also:
Denise Herd. (2008) “Changes in Drug Use Prevalence in Rap Music Songs, 1979–1997.” *Addiction Research and Theory*. Vol. 16, No. 2, pp. 167-180.
498. Cyndi Lauper. (2010) “The 2010 Time 100: Lady Gaga.” *Time*. Apr. 29, 2010. [Link](#)
Nate Silver. (2010) “The Influence Index.” *Time*. Apr. 29, 2010. [Link](#)
499. Pomerantz, Dorothy. “Lady Gaga Tops Celebrity 100 List.” *Forbes*. May 18, 2011. [Link](#)
500. Benji Wilson. (2010) “Lady Gaga Gets Lippy: The Pop Star Teams with Mac to Raise AIDS Awareness.” *Daily Mail*. Apr. 10, 2010. [Link](#)
501. Ariel Schwartz. (2011) “The Lady Gaga Effect: Pop Star’s Social Media Savvy Helps the MAC AIDS Fund Raise Millions of Bucks.” *Fast Company*. Feb. 18, 2011. [Link](#)
502. David Fricke. (2009) “U2 Join Lady Gaga, Scarlett Johansson and More for Gavin Friday Benefit at Carnegie Hall.” *Rolling Stone*. Oct. 5, 2009. [Link](#)
Jennifer Vineyard. (2010) “Lady Gaga Salutes Elton John with Special Set at All-Star amfAR Gala.” *Rolling Stone*. Feb. 11, 2010. [Link](#)
503. Gil Kaufman. (2011) “Lady Gaga Dresses Like a Condom to Promote AIDS Awareness.” *MTV*. Feb. 17, 2011. [Link](#)
504. Gil Kaufman. (2011) “Lady Gaga Questions President Obama on Bullying.” *MTV News*. Sep. 27, 2011. [Link](#)
505. “I’ve got a lot of young fans and the truth is I don’t want anyone doing drugs, A, and B, honestly you should wait as long as you can to have sex because as a woman you don’t even begin to enjoy it until your mid 20s.”
Sarah Fitzmaurice. (2011) “‘Don’t Have Sex for As Long As Possible’: Lady Gaga Pleads with Her Female Fans while Dressed in an S&M-Inspired PVC Outfit.” *Daily Mail*. Jul. 21, 2011. [Link](#)
506. Staff Writer. (2010) “Lady Gaga Tells Women to Stay Celibate.” *The Telegraph*. Mar. 2, 2010. [Link](#)
507. Benji Wilson. (2010) “Lady Gaga Gets Lippy: The Pop Star Teams with Mac to Raise AIDS Awareness.” *Daily Mail*. Apr. 10, 2010. [Link](#)

508. People are less likely to exhibit reactance when a message comes from someone who is similar or who shares their values.
- Paul Silvia. (2005) "Deflecting Reactance: The Role of Similarity in Increasing Compliance and Reducing Resistance." *Basic and Applied Social Psychology*. Vol. 27, No. 3, pp. 277-284.
509. Stacy Tessler Lindau, L. Philip Schumm, Edward Laumann, Wendy Levinson, Colm O'Muircheartaigh, Linda Waite. (2007) "A Study of Sexuality and Health among Older Adults in the United States." *The New England Journal of Medicine*. Vol. 357, No. 8 , pp. 762-774.
510. Stephanie Sanders, Michael Reece, Debby Herbenick, Vanessa Schick, Brian Dodge, J. Dennis Fortenberry. (2010) "Condom Use During Most Recent Vaginal Intercourse Event among a Probability Sample of Adults in the United States." *The Journal of Sexual Medicine*. Vol. 7, No. S5, pp. 362-373.
- Vanessa Schick, Debby Herbenick, Michael Reece, Stephanie Sanders, Brian Dodge, Susan Middlestadt, J. Dennis Fortenberry. (2010) "Sexual Behaviors, Condom Use, and Sexual Health of Americans Over 50: Implications for Sexual Health Promotion for Older Adults." *The Journal of Sexual Medicine*. Vol. 7, No. S5, pp. 315-329.
511. Sarit Golub, Julia Tomassilli, David Pantalone, Mark Brennan, Stephen Karpiak, Jeffrey Parsons. (2010) "Prevalence and Correlates of Sexual Behavior and Risk Management among HIV-Positive Adults Over 50." *Sexually Transmitted Diseases*. Vol. 37, No. 10, pp. 615-620.
512. Stacy Tessler Lindau, L. Philip Schumm, Edward Laumann, Wendy Levinson, Colm O'Muircheartaigh, Linda Waite. (2007) "A Study of Sexuality and Health among Older Adults in the United States." *The New England Journal of Medicine*. Vol. 357, No. 8 , pp. 762-774.
513. Susan Henderson, Lisa Bernstein, Diane Marie St. George, Joyce Doyle, Anuradha Paranjape, Giselle Corbie-Smith. (2004) "Older Women and HIV: How Much Do They Know and Where Are They Getting Their Information?" *Journal of the American Geriatrics Society*. Vol. 52, No. 9, pp. 1549-1553.
- Karin Ann Mack, Shayne Delmar Bland. (1999) "HIV Testing Behaviors and Attitudes Regarding HIV/AIDS of Adults Aged 50-64." *The Gerontologist*. Vol. 39, No. 6, pp. 687-694.
514. Centers for Disease Control and Prevention. (2007) "Cases of HIV infection and AIDS in the United States and Dependent Areas, 2005." *HIV/AIDS Surveillance Report*. Vol. 17, Revised Edition. Centers for Disease Control and Prevention. Atlanta, GA.
515. Stacy Tessler Lindau, Sara Leitsch, Kristina Lundberg, Jessica Jerome. (2006) "Older Women's Attitudes, Behavior, and Communication about Sex and HIV: A Community-Based Study." *Journal of Women's Health*. Vol. 15, No. 6, pp. 747-753.
516. Placing responsibility on the individual is critical to undertaking difficult tasks.

Bernard Weiner. (1985) "An Attributional Theory of Achievement Motivation and Emotion." *Psychological Review*. Vol. 92, No. 4, pp. 548-573.

Note: This has been observed as a European/American trait. Working toward a common goal is the aspect of the movement that would appeal more to Asian cultures.

Jonathan Gore, Susan Cross, Chie Kanagawa. (2009) "Acting in Our Interests: Relational Self-Construal and Goal Motivation across Cultures." *Motivation and Emotion*. Vol. 33, No. 1, pp. 75-87.

Shigehiro Oishi, Ed Diener. (2009) "Goals, Culture, and Subjective Well-Being." *Social Indicators Research Series*, Vol. 38, No. 1, pp. 93-108.

517. We can and will make automatic decisions that further our goals, but only if we have truly accepted them.

John Bargh, Melissa Ferguson. (2000) "Beyond Behaviorism: On the Automaticity of Higher Mental Processes." *Psychological Bulletin*. Vol. 126, No. 6, pp. 925-945.

518. This article discusses the complex factors that affect forgoing immediate urges to work toward a long-term goal.

Antoine Bechara. (2005) "Decision Making, Impulse Control and Loss of Willpower to Resist Drugs: A Neurocognitive Perspective." *Nature Neuroscience*. Vol. 8, No. 11, pp. 1458-1463.

519. Kathryn Greene, Smita Banerjee. (2006) "Disease-Related Stigma: Comparing Predictors of AIDS and Cancer Stigma." *Journal of Homosexuality*. Vol. 50, No. 4, pp. 185-209.

520. "In 2009, blacks/African Americans accounted for 52% of all diagnoses of HIV infection."

Centers for Disease Control and Prevention. (2011) "Diagnoses of HIV Infection and AIDS in the United States and Dependent Areas, 2009." *HIV Surveillance Report*. Vol. 21. Centers for Disease Control and Prevention. Atlanta, GA.

In 2008, black/African Americans were estimated to be eight times as likely as white Americans to acquire HIV in their lifetimes.

W.K. Adih, X. Hu, M.L. Campsmith, L. Espinoza, H.I. Hall. (2010) "Estimated Lifetime Risk for Diagnosis of HIV Infection among Hispanics/Latinos --- 37 States and Puerto Rico, 2007." *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 59, No. 40, pp. 1297-1301. Centers for Disease Control and Prevention. Atlanta, GA.

521. James Bettman. (1979) "Memory Factors in Consumer Choice: A Review." *The Journal of Marketing*. Vol. 43, No. 2, pp. 37-53.

This particular article was chosen because these campaigns share several aspects with other consumer marketing efforts. For more information on how memories form and how we work with them, *Science* has some great articles:

James McGaugh. (2000) "Memory – A Century of Consolidation." *Science*. Vol. 287, No. 5451, pp. 248-251.

Alan Baddeley. (1992) "Working Memory." *Science*. Vol. 255, No. 5044, pp. 556-559.

522. There has been almost no change in the annual number of new HIV cases since 1991.

H. Irene Hall, Ruiguang Song, Philip Rhodes, Joseph Prejean, Qian An, Lisa Lee, John Karon, Ron Brookmeyer, Edward Kaplan, Matthew McKenna, Robert Janssen. (2008) "Estimation of HIV Incidence in the United States." *Journal of the American Medical Association*. Vol. 300, No. 5, pp. 520-529.

523. Duncan MacKellar, Linda Valleroy, Gina Secura, Stephanie Behel, Trista Bingham, David Celentano, Beryl Koblin, Marlene LaLota, Douglas Shehan, Hanne Thiede, Lucia Torian. (2007) "Perceptions of Lifetime Risk and Actual Risk for Acquiring HIV among Young Men Who Have Sex with Men." *AIDS and Behavior*. Vol. 11, No. 2, pp. 263-270.

524. Centers for Disease Control and Prevention. (2009) "HIV Prevention in the United States: At a Critical Crossroads." Centers for Disease Control and Prevention. Atlanta, GA.

525. Ole Benedictow. (2004) "The Black Death, 1346-1353: The Complete History." Boydell Press. Woodbridge, UK.

526. J. Mitchell Harris II, Jack Gwaltney, Jr. (1996) "Incubation Periods of Experimental Rhinovirus Infection and Illness." *Clinical Infectious Diseases*. Vol. 23, No. 6, pp. 1287-1290.

527. George Rutherford, Alan Lifson, Nancy Hessel, William Darrow, Paul O'Malley, Susan Buchbinder, J. Lowell Barnhart, Torsten Bodecker, Lyn Cannon, Lynda Doll, Scott Holmberg, Janet Harrison, Martha Rogers, David Werdegar, Harold Jaffe. (1990) "Course of HIV-I Infection in a Cohort of Homosexual and Bisexual Men: An 11 Year Follow Up Study." *British Medical Journal*. Vol. 301, No. 6762, pp. 1183-1188.

Susan Buchbinder, Mitchell Katz, Nancy Hessel, Paul O'Malley, Scott Holmberg. (1994) "Long-Term HIV-1 Infection Without Immunological Progression." *AIDS*. Vol. 8, No. 8, pp. 1123-1128.

528. Terho Heikkinen, Asko Järvinen. (2003) "The Common Cold." *The Lancet*. Vol. 361, No. 1, pp. 51-59.

529. Chuen-Yen Lau, Azhar Qureshi. (2002) "Azithromycin Versus Doxycycline for Genital Chlamydial Infections: A Meta-Analysis of Randomized Clinical Trials." *Sexually Transmitted Diseases*. Vol. 29, No. 9, pp. 497-502.

530. The Antiretroviral Therapy Cohort Collaboration. (2008) "Life Expectancy of Individuals on Combination Antiretroviral Therapy in High-Income Countries: A Collaborative Analysis of 14 Cohort Studies." *The Lancet*. Vol. 372, No. 9635, pp. 293-299.

531. Ard van Sighem, Luuk Gras, Peter Reiss, Kees Brinkman, Frank de Wolf. (2010) "Life Expectancy of Recently Diagnosed Asymptomatic HIV-Infected Patients Approaches That of Uninfected Individuals." *AIDS*. Vol. 24, No. 10, pp. 1527-1535.
532. Suzanna Attia, Matthias Egger, Monika Müller, Marcel Zwahlen, Nicola Low. (2009) "Sexual Transmission of HIV According to Viral Load and Antiretroviral Therapy: Systematic Review and Meta-Analysis." *AIDS*. Vol. 23, No. 11, pp. 1397-1404.
533. Gary Marks, Nicole Crepaz, J. Walton Senterfitt, Robert Janssen. (2005) "Meta-Analysis of High-Risk Sexual Behavior in Persons Aware and Unaware They Are Infected with HIV in the United States: Implications for HIV Prevention Programs." *Journal of Acquired Immune Deficiency Syndromes*. Vol. 39, No. 4, pp. 446-453.
- Lance Weinhardt, Michael Carey, Blair Johnson, Nicole Bickham. (1999) "Effects of HIV Counseling and Testing on Sexual Risk Behavior: A Meta-Analytic Review of Published Research, 1985-1997." *American Journal of Public Health*. Vol. 89, No. 9, pp. 1397-1405.
534. O. Diekmann, J. A. P. Heesterbeek, J. A. J. Metz. (1990) "On the Definition and the Computation of the Basic Reproduction Ratio R_0 in Models for Infectious Diseases in Heterogeneous Populations." *Journal of Mathematical Biology*. Vol. 28, No. 4, 365-382.
535. Herbert Hethcote. (1989) "Three Basic Epidemiological Models." (Simon Levin, Thomas Hallam, Louis Gross, Eds.) In "Applied Mathematical Ecology." Springer-Verlag. Berlin, Germany. pp. 119-144.
- M. Elizabeth Halloran, Stephen Cochi, Tracy Lieu, Melinda Wharton, Laura Fehrs. (1994) "Theoretical Epidemiologic and Morbidity Effects of Routine Varicella Immunization of Preschool Children in the United States." *American Journal of Epidemiology*. Vol. 140, No. 2, pp. 81-104.
- Matthew Schuette. (2003) "A Qualitative Analysis of a Model for the Transmission of Varicella-Zoster Virus." *Mathematical Biosciences*. Vol. 182, No. 2, pp. 113-126.
536. Nicholas Grassly, Christophe Fraser. (2008) "Mathematical Models of Infectious Disease Transmission." *Nature Reviews Microbiology*. Vol. 6, No. 6, pp. 477-487.
537. A. David Paltiel, Rochelle Walensky, Bruce Schackman, George Seage III, Lauren Mercincavage, Milton Weinstein, Kenneth Freedberg. (2006) "Expanded HIV Screening in the United States: Effect on Clinical Outcomes, HIV Transmission, and Costs." *Annals of Internal Medicine*. Vol. 145, No. 11, pp. 797-806.
- Klaus Dietz. (1993) "The Estimation of the Basic Reproduction Number for Infectious Diseases." *Statistical Methods in Medical Research*. Vol. 2, No. 1, pp. 23-41.

538. C. P. Farrington, M. N. Kanaan, N. J. Gay. (2001) "Estimation of the Basic Reproduction Number for Infectious Diseases from Age-Stratified Serological Survey Data." *Applied Statistics*. Vol. 50, No. 3, pp. 251-292.
539. Susan Cassels, Samuel Clark, Martina Morris. (2008) "Mathematical Models for HIV Transmission Dynamics: Tools for Social and Behavioral Science Research." *Journal of Acquired Immune Deficiency Syndromes*. Vol. 47, No. S1, pp. S34-S39.

More detailed methods of calculating the basic reproductive ratio:

P. van den Driessche, James Watmough. (2002) "Reproduction Numbers and Sub-Threshold Endemic Equilibria for Compartmental Models of Disease Transmission." *Mathematical Biosciences*. Vol. 180, No. 1, pp. 29-48.

O. Diekmann, J. A. P. Heesterbeek, J. A. J. Metz. (1990) "On the Definition and the Computation of the Basic Reproduction Ratio R_0 in Models for Infectious Diseases in Heterogeneous Populations." *Journal of Mathematical Biology*. Vol. 28, No. 4, pp. 365-382.

540. Richard Crosby, Stephanie Sanders, William Yarber, Cynthia Graham, Brian Dodge. (2002) "Condom Use Errors and Problems among College Men." *Sexually Transmitted Diseases*. Vol. 29, No. 9, pp. 552-557.

Marie Helweg-Larsen, Barry Collins. (1994) "The UCLA Multidimensional Condom Attitudes Scale: Documenting the Complex Determinants of Condom Use in College Students." *Health Psychology*. Vol. 13, No. 3, pp. 224-237.

Paschal Sheeran, Charles Abraham, Sheina Orbell. (1999) "Psychosocial Correlates of Heterosexual Condom Use: A Meta-Analysis." *Psychological Bulletin*. Vol. 125, No. 1, pp. 90-132.

Jennifer Manlove, Suzanne Ryan, Kerry Franzetta. (2003) "Patterns of Contraceptive Use within Teenagers' First Sexual Relationships." *Perspectives on Sexual and Reproductive Health*. Vol. 35, No. 6, pp. 246-255.

541. Ronald Gray, Maria Wawer, Ron Brookmeyer, Nelson Sewankambo, David Serwadda, Fred Wabwire-Mangen, Tom Lutalo, Xianbin Li, Thomas vanCott, Thomas Quinn, The Rakai Project Team. (2001) "Probability of HIV-1 Transmission per Coital Act in Monogamous, Heterosexual, HIV-1-Discordant Couples in Rakai, Uganda." *The Lancet*. Vol. 357, No. 9263, pp. 1149-1153.

542. Esther Freeman, Helen Weiss, Judith Glynn, Pamela Cross, James Whitworth, Richard J. Hayes. (2006) "Herpes Simplex Virus 2 Infection Increases HIV Acquisition in Men and Women: Systematic Review and Meta-Analysis of Longitudinal Studies." *AIDS*. Vol. 20, No. 1, pp. 73-83.

543. "From the distribution of self-reported frequency of hookups, it can be inferred that some students are hooking up on a weekly basis."

Elizabeth Paul, Brian McManus, Allison Hayes. (2000) "'Hookups': Characteristics and Correlates of College Students' Spontaneous and

Anonymous Sexual Experiences.” *Journal of Sex Research*. Vol. 37, No. 1, pp. 76-88.

This behavior was increasingly common.

Catherine Grello, Deborah Welsh, Melinda Harper. (2006) “No Strings Attached: The Nature of Casual Sex in College Students.” *The Journal of Sex Research*. Vol. 43, No. 3, pp. 255-267.

544. Martin Morris, Mirjam Kretzschmar. (1997) “Concurrent Partnerships and the Spread of HIV.” *AIDS*. Vol. 11, No. 5, pp. 641-648.
545. Eileen Schneider, Suzanne Whitmore, M. Kathleen Glynn, Kenneth Dominguez, Andrew Mitsch, Matthew McKenna. (2008) “Revised Surveillance Case Definitions for HIV Infection among Adults, Adolescents, and Children Aged <18 Months and for HIV Infection and AIDS among Children Aged 18 Months to <13 Years --- United States, 2008.” *Morbidity and Mortality Weekly Report (MMWR)*. Vol. 57, No. RR10, pp. 1-8. Centers for Disease Control and Prevention. Atlanta, GA.
546. Thomas Quinn, Maria Wawer, Nelson Sewankambo, David Serwadda, Chuanjun Li, Fred Wabwire-Mangen, Mary Meehan, Thomas Lutalo, Ronald Gray. (2000) “Viral Load and Heterosexual Transmission of Human Immunodeficiency Virus Type 1.” *The New England Journal of Medicine*. Vol. 342, No. 13, pp. 921-929.
547. James Kahn, Bruce Walker. (1998) “Acute Human Immunodeficiency Virus Type 1 Infection.” *The New England Journal of Medicine*. Vol. 339, No. 1, pp. 33-39.
548. Eric Daar, Tarsem Moudgil, Richard Meyer, David Ho. (1991) “Transient High Levels of Viremia in Patients with Primary Human Immunodeficiency Virus Type 1 Infection.” *The New England Journal of Medicine*. Vol. 324, No. 14, pp. 961-964.
- M. Piatak, Jr., M. S. Saag, L. C. Yang, S. J. Clark, J. C. Kappes, K.-C. Luk, B. H. Hahn, G. M. Shaw, J. D. Lifson. (1993) “High Levels of HIV-1 in Plasma During All Stages of Infection Determined by Competitive PCR.” *Science*. Vol. 259, No. 5102, pp. 1749-1754.
- The virus’ pattern initially varies between individuals, but eventually becomes similar.
- Gilbert Kaufmann, Philip Cunningham, Anthony Kelleher, John Zaunders, Andrew Carr, Jeanette Vizzard, Matthew Law, David Cooper, The Sydney Primary HIV Infection Study Group. (1998) “Patterns of Viral Dynamics During Primary Human Immunodeficiency Virus Type 1 Infection.” *The Journal of Infectious Diseases*. Vol. 178, No. 6, pp. 1812-1815.
549. Ira Longini Jr., W. Scott Clark, Robert Byers, John Ward, William Darrow, George Lemp, Herbert Hethcote. (1989) “Statistical Analysis of the Stages of HIV Infection Using a Markov Model.” *Statistics in Medicine*. Vol. 8, No. 7, pp. 831-843.

550. Rochelle Walensky, A. David Paltiel, Elena Losina, Lauren Mercincavage, Bruce Schackman, Paul Sax, Milton Weinstein, Kenneth Freedberg. (2006) "The Survival Benefits of AIDS Treatment in the United States." *The Journal of Infectious Diseases*. Vol. 194, No. 1, pp. 11-19.
551. Christopher Pilcher, Hsiao Chuan Tien, Joseph Eron, Pietro Vernazza, Szun-Yun Leu, Paul Stewart, Li-Ean Goh, Myron Cohen. (2004) "Brief but Efficient: Acute HIV Infection and the Sexual Transmission of HIV." *The Journal of Infectious Diseases*. Vol. 189, No. 10, pp. 1785-1792.
- Maria Wawer, Ronald Gray, Nelson Sewankambo, David Serwadda, Xianbin Li, Oliver Laeyendecker, Noah Kiwanuka, Godfrey Kigozi, Mohammed Kiddugavu, Thomas Lutalo, Fred Nalugoda, Fred Wabwire-Mangen, Mary Meehan, Thomas Quinn. (2005) "Rates of HIV-1 Transmission per Coital Act, by Stage of HIV-1 Infection, in Rakai, Uganda." *The Journal of Infectious Diseases*. Vol. 191, No. 9, pp. 1403-1409.
- Steven Pinkerton. (2007) "How Many Sexually-Acquired HIV Infections in the USA Are Due to Acute-Phase HIV Transmission?" *AIDS*. Vol. 21, No. 12, pp. 1625-1629.
- T. Déirdre Hollingsworth, Roy Anderson, Christophe Fraser. (2008) "HIV-1 Transmission, by Stage of Infection." *The Journal of Infectious Diseases*. Vol. 198, No. 5, pp. 687-693.
552. Gary Marks, Nicole Crepaz, Robert Janssen. (2006) "Estimating Sexual Transmission of HIV from Persons Aware and Unaware That They Are Infected with the Virus in the USA." *AIDS*. Vol. 20, No. 10, pp. 1447-1450.
553. Nicholas Grassly, Christophe Fraser. (2008) "Mathematical Models of Infectious Disease Transmission." *Nature Reviews Microbiology*. Vol. 6, No. 6, pp. 477-487.
554. For these purposes, due to HIV's extremely long incubation period, being detected via antibody tests can also be considered a symptom, which is also not possible at first. Most other infections make themselves known only through symptoms, and people do not typically test themselves for other infections that produce no symptoms, yet HIV tests are common.
555. Nicholas Grassly, Christophe Fraser. (2008) "Mathematical Models of Infectious Disease Transmission." *Nature Reviews Microbiology*. Vol. 6, No. 6, pp. 477-487.
556. Steven Pinkerton. (2007) "How Many Sexually-Acquired HIV Infections in the USA Are Due to Acute-Phase HIV Transmission?" *AIDS*. Vol. 21, No. 12, pp. 1625-1629.
557. All things held constant, models using the lower transmission rates of later stages of the disease suggest that a widespread HIV epidemic would be unsustainable. (This theoretical scenario shifts even more variables in a favorable direction.)
- Steven Pinkerton, Paul Abramson, Seth Kalichman, Sheryl Catz, Ana Johnson-Masotti. (2000) "Secondary HIV Transmission Rates in a Mixed-

Gender Sample.” *International Journal of STD & AIDS*. Vol. 11, No. 1, pp. 38-44.

558. Luís Bettencourt, Ariel Cintrón-Arias, David Kaiser, Carlos Castillo-Chávez. (2006) “The Power of a Good Idea: Quantitative Modeling of the Spread of Ideas from Epidemiological Models.” *Physica A: Statistical Mechanics and Its Applications*. Vol. 364, pp. 513-536.

