Freakonomics Summary

By Stephen J. Dubner

We've been led to believe that numbers are complicated and tedious. In fact, many of us duck for cover, or flee outright at the very idea of being faced with numerical data. But here's a secret, numbers often tell the best stories, and no one illustrates this more effectively than the brainiac double-act of Dubner and Levitt.

Freakonomics answers the question as to whether we can apply economics to everyday life. Rather than being guided by our irrational decision-making processes, the authors show us how to utilize rational and critical thought regarding things like purchasing a house, parenting, providing incentives, or even the decision to cheat.

By encouraging us to be curious, the message is that if we follow the data and the numbers, we're shown how common wisdom and popular belief are so often flawed.

Stephen Dubner and Steven Levitt are a dynamic duo consisting of a journalist and economist. The two met when Dubner was asked to write an article on Levitt for *The New York Times Magazine*. Neither of them showed much interest in meeting each other, but when the two-hour interview kicked off, it turned into a three-day powwow. The powwow turned into a collaborative partnership resulting in books, a blog, and a podcast that tackle economics in real-world scenarios.

This summary will briefly take us through the key insights in the book. By delving into a range of empirical research, we'll look at how numbers

often reveal secrets, how economics can add insight into everyday life experiences, and the power of economic motivation and incentives as a driving force of behavior. We'll also debunk some common beliefs and myths, and critique experts and gaps in knowledge. We'll also see that humans can lie and cheat, but it's very seldom that we can say the same about numbers.

What's in an Incentive?

What motivates and drives your behavior? Is it money, family, reaching your goals? Many things motivate us, but at the heart of this is the idea of incentives.

Some incentives are subtle, and others are a lot more obvious.

There are incentives that focus on rewarding good behaviour. Maybe your boss is offering a monetary bonus for reaching monthly KPIs; maybe your grocery store offers a discount for buying in bulk? Or perhaps your pedometer is nudging you to move more to get to your daily goal?

Incentives can also discourage you from breaking the rules. Perhaps it's a traffic fine, maybe it's a photograph wall of shame for shoplifting, or it could be a negative letter in an employment file?

In a nutshell, incentives are all about getting us to improve, and they fall into three categories. There are moral, economic, and social incentives, and the best type of motivation is the one that combines all three elements.

What's preventing you from robbing a bank?

Perhaps you've weighed up the risk of the reward with the fact that you're likely to lose everything? Maybe you think that it goes against your belief system or ethical code? Or you might feel that being labeled as a criminal will have devastating effects on your friendships and family? In all likelihood, you haven't robbed a bank because of a mixture of all these reasons.

When Good Incentives Go Bad

Designing incentive schemes are often a lot trickier than we imagine. This is because we naturally want to get as much out of a situation as possible. When incentives are designed, potential loopholes and grey areas need to be identified as quickly as possible. Many incentives look good on paper, but have unintended consequences. It's human nature to want to get the best outcome for ourselves, which is why incentive design needs thorough research and interrogation.

For example, Levitt talks about potty-training his daughter. Levitt's daughter went from using the potty, to changing her mind and regressing. As the economist in the family, Levitt told his wife that he'd handle this situation, and all that was needed was a little incentive. Levitt identified that his daughter loves a particular brand of candy, so every time she used the potty, he would give her a bag of her favorite candy. Things went really well for a few days, and Levitt was pretty smug about the outcome. However, his young toddler found a loophole. The number of times she needed to "go potty" increased exponentially, and Levitt found she wasn't emptying her bladder entirely, so she could use the potty more often, thereby getting more candy. If a toddler can dupe a

world-renowned economist, this illustrates how complex designing incentives are. Ultimately people are creative and will look for ways to get the most out of something and beat the system.

When incentive schemes fail at micro-levels, they're relatively easy to rectify, but what happens when they fail at a macro-level? Well, things begin unraveling, and the unthinkable happens. For example, would you ever believe that a vast number of teachers started cheating on the SATs?

Let's go back in time to America in the late '90s. A few states decided to initiate an incentive scheme to improve test scores, by rewarding or punishing schools depending on overall performance. The federal government offered substantial financial incentives to schools with higher test scores, by providing more overall funding to the school, and significant raises for teachers. On the other hand, schools with poor test scores were treated harshly. The government pulled or cut funding, and in some cases teachers were fired.

With such high stakes, there was massive pressure on the teachers to take responsibility and improve results. When you create an either-or situation that's in such stark contrast, problems arise. If you have the choice of $25000 or getting fired, what would you do? It turns out many teachers succumbed to the pressure, and did everything in their power to raise test scores. They gave students extra time, provided correct answers, and even filled in answers themselves.

But how do you prove cheating unless you're in the room? Well, our authors say that you scrutinize the data, because numbers don't lie.

Many people and groups criticized the policy, but it was very difficult to

prove that there was anything underhanded going on. Enter the statisticians. There was seven years' worth of data to analyze, and when it was closely scrutinized, it told some fascinating stories. The first was that students who typically performed badly on tests, miraculously did very well. Then there were large classes that did very well, even though they'd underperformed in previous years. Another red flag was that students were getting easy questions wrong in many cases, and answering the difficult questions correctly.

Anyone who's ever spoken to an economist or statistician will know that they argue that there's no such thing as coincidences. Their investigation revealed the rot in the school system because of this poorly conceived incentive scheme. Two hundred classrooms per year were caught cheating, which represented 5% of Chicago Public Schools.

When Incentives Aren't Aligned

Are we naive to trust experts?

We live in a world where we're offered an abundance of choice, and there's increased levels of specialization in almost every aspect of everyday life. So of the decisions that we make have extreme consequences, while others are less severe. Owing to the enormous variety of choices that we need to make, we often rely on experts to guide us, but this doesn't always have the desired consequences.

What makes a good expert? We imagine that experts have an ethical compass, where they don't use their advanced knowledge to hoodwink the public; however this is seldom the case. Experts are human, and they often have their own interests at heart. The fundamental problem is that

when levels of expertise aren't aligned, this is known as "information asymmetry," and it means that there's an unequal distribution of power between parties.

How many times have you walked into a computer store, or a car mechanic, asking for advice, and then feeling completely out of your depth? Experts often play on this by serving their own interests, ahead of the person they're trying to help. Knowledge can be used as huge currency, and we need to be critical of the numerous imbalances when it comes to specialist knowledge.

They say that "knowledge is power," and a great example of this is the rise and fall of the Ku Klux Klan. We might think that the power of the organization was in their spread of fear and violence, but when researchers interrogated this, they found that information was one of the leading factors that gave power to the domestic terrorism organization.

The KKK were always highly secretive, and they used this secrecy to give outsiders the idea that they were a lot bigger and more organized than people thought. Outsiders were under the impression that this group, which was shrouded in mystery, was stronger than they were. In the 1940s, two journalists infiltrated the Klan and exposed a lot of information about them. Once they learned vital information about the KKK, the journalists publicized this. What was a previously secret and mysterious group, became exposed, and through this exposure, the KKK became less intimidating. The facade that the Klan had built crumbled, and the public started to see them as what they were, a group of poorly educated and unemployed individuals who could be mocked rather than feared.

Reading It on the Internet

While "knowledge is power," they also say that "a little knowledge is a dangerous thing." The Internet often gets a bad rap for encouraging idiocracy and misinformation. However, the Internet has done a great deal in bridging the gap in information asymmetry.

How do you reduce the cost of life insurance by one billion dollars?

It all starts with opening up access to information. With the rise of the Internet, access to information became a lot easier. Whereas before we'd have to rely on experts to inform us about complex issues, now we can find out information across a broad range of subjects.

How do you pick life insurance? According to our authors, most life insurance policies are pretty standard, but the price can differ significantly, and before the Internet, they ran amok with their pricing. Price comparison was very time-consuming, and so people relied on experts to decide for them. This led to a lot of problems, and consumers were typically exploited.

When price comparison websites emerged, the insurance industry had no choice but to decrease prices and become more transparent.

Going Against the Grain and Looking Deeper

One of the book's key insights is that we need to be a lot more critical and ask more questions. So often we take data at face value, and our

authors encourage us to extend our thinking, even if it's controversial.

In America, the 1990s began under a cloud. The country had experienced unprecedented crime levels, and analysts were expecting crime to escalate even more throughout the decade.

However, the 1990s were actually a time of reduced crime numbers, and experts were flummoxed. Experts explained the drop in crime as being due to six factors. The six factors were economic growth, greater incarceration levels, more prominent police presence, gun control, aging of the population, and the decrease of crack. When our authors analyzed these factors, they argued that while they account for some of the reductions in crime rates, they weren't telling the whole story. Levitt crunched the numbers, and he estimated that the six factors, while significant, didn't add up to 100%. He suggested that there was a missing 40%, and his argument points to something that happened in 1973.

So let's trace the author's argument. In 1973 Roe v Wade's legalization of abortion occurred. The type of women who typically opt for abortion are generally teenagers, poor, single, and/or drug and alcohol dependent. The knock-on effect of this is that their children are more likely to be raised in unstable environments, which could direct them towards criminal activity.

The numbers show that by 1980, 1.6 million abortions were performed, and out of these, a significant number were requested by the demographic described above. About twenty years later, crime began falling, and the authors argue that this is because of the abortion rate. Levitt and Dubner also point towards other similar research.

The authors are vehement that this isn't an argument about pro-choice or

pro-life. Instead, it's about interrogating every argument in order to perform more rigorous research. We need to look at the numbers and critique common-sense findings. We need to be more curious and inquisitive and ask the difficult questions to consider that the world isn't simple, and we can't simplify results into neat categories.

Cause and Effect

Cause and effect are one of the ways that we like to simplify the world. Perhaps every time you wash your car it rains? Maybe you ace every exam every time you take along your lucky charm? Perhaps a friend gave you a Baby Mozart cd to turn your baby into a genius in utero?

Causation and correlation are fascinating, and they can be seen very clearly when it comes to the high octane world of parenting. Whether you're a parent or not, you probably have asked yourself what kind of parent you'd be, and you may have had conversations with others about what parenting entails. Parenting is now an industry, and every year advice and paraphernalia increase. The trouble is, it's an ever-changing field of knowledge, and experts often have to back-track on what's considered good-parenting, and what's not.

Something as simple as sleeping is a veritable minefield. Some experts strongly advocated for co-sleeping; now it's dangerous. Stomach sleeping was the preferred position; now experts say that's definitely not encouraged. In fact, some say that it increases the risk of death.

Parenting is now a hotbed of differing views and opinions, and parentsare encouraged to do whatever they can to give their child the very beststart in life.

The US Department of Education conducted a fascinating study in the 1990s. The Early Childhood Longitudinal Study examined 20 thousand children. These children were analyzed from Kindergarten until the fifth grade. Their parents and educators also took part in the study, and the researchers asked a broad range of questions.

The study found that things like attending museums, frequent television viewing, attending baby and toddler groups, having a stay-at-home mother, and coming from a heteronormative two-parent household did not affect test scores. The study showed that academic performance could be correlated with parents' inherent characteristics. This reveals that who parents are, is more important than what they do. The authors argue that if you're the type of person who buys 20 parenting books, it's unlikely that the books will help. However, that you're the type of person who wants to buy those books is significant.

In Conclusion

Freakonomics is a book that encourages us to ask unconventional and unpopular questions. It's not about being right; it's about having the courage to look outside of the proverbial box and ask exciting and compelling questions.

Have you ever thought that you'd be more successful if you had a different name? Have you ever wondered if you'd have got better grades if you were given a financial incentive? And, what do you think would lead

you over the edge in terms of cheating or breaking the rules?

By delving into really insightful and intriguing data, we're shown how complex everyday life and behavior are. The case studies and arguments in this book are contrary and unconventional, and it's not about whether we're on board with them or not. The true joy is how brave and compelling the arguments and analysis are. The challenge is to broaden our thinking, be curious, and challenge our assumptions about the world. And the first assumption we need to get rid of, is that numbers and data are boring.